

THE ARCHITECT & BUILDING NEWS

19 MAY 1955 · VOL. 207 · NO. 20 · ONE SHILLING WEEKLY

• CONTROL BUILDING, LONDON AIRPORT

• ASSEMBLY SHOP, MURPHY RADIO FACTORY

PUBLISHED IN LONDON SINCE 1854



Earning dollars in Canada —

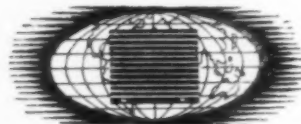
At Toronto's 1954 International Trade Fair large orders for Brady Rolling Doors were booked on their stand, bringing more dollars to Britain. With an international reputation for reliability, Brady Rolling Doors are aiding British industry throughout the world.



This illustration of the Brady Stand at the Toronto Trade Fair shows a large F3 Rolling Door in the centre. On the left is a small grille with Shutter in front of it, and on the right an aluminium Rolling Shutter, all suitable for Bars and Service Openings

G. BRADY & CO. LTD MANCHESTER 4 Telephone COLlyhurst 2727/8

LONDON New Islington Works, Park Royal, N.W.10
BIRMINGHAM Rectory Park Road, Sheldon, 26
CANADA David C. Orrock & Co. (G. Brady & Co. Canada Ltd.)
 1405 Bishop Street, Montreal 25, Que.
 and also at 23 Scott Street, Toronto, 1
U.S.A. G. Brady & Co. Ltd., 11 West 42nd St. New York 18, N.Y.
NORWAY An Thorbjørnsen, Kongensgate, 14, Oslo
 And also at Cape Town



we shutter the world

MANUFACTURERS OF BRADY HAND AND POWER OPERATED LIFTS



QUICK DELIVERY FOR METAL WINDOWS— AND UNEXPLODED BOMBS.

Major Yard's* hobby is bomb disposal. He was attracted to this rather unhealthy form of amusement during the war—but not (as facetious juniors have suggested) to protect the Williams & Williams windows he had supplied. Now, as spare-time Sapper Major in the Army Reserve, you are duly warned that he is keen on recruiting for his Army Emergency Reserve 137 Bomb Disposal Regiment.

Major Yard is our North Eastern Divisional Manager. Responsible for the efficiency of the Williams & Williams service offices at Newcastle, Sheffield, Leeds and Nottingham, he is within a short car ride of each—and of any architect in their areas who has a problem on his mind regarding any of the products shown right. In his quiet, efficient manner Major Yard has a way of dealing with problems with the minimum of fuss and noise.

* Major H. Yard supervises NEWCASTLE-UPON-TYNE 21353.

NOTTINGHAM 52131 • LEEDS 21208 • AND SHEFFIELD 51594.

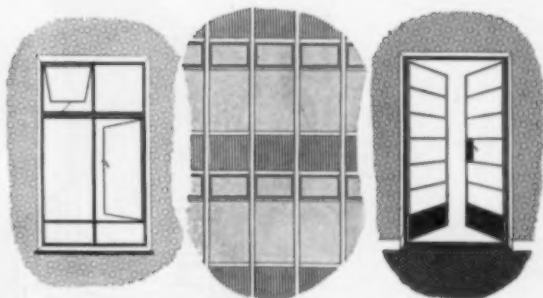
Other area offices at: Belfast (23762). Birmingham (Shirley 3064). Bristol (38907). Bromley (Ravensbourne 6274). Cardiff (27092). Crawley (2200). Glasgow (Douglas 0003). Hertford (3969). Liverpool (Central 0325). London (Sloane 0323). Maidstone (51750). Manchester (Blackfriars 9591). Norwich (24393). Reading (50291). Southampton (26252).

METAL WINDOWS

WILLIAMS & WILLIAMS



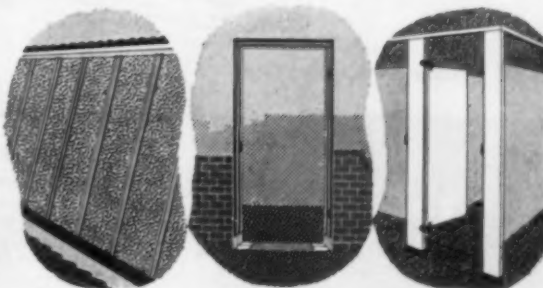
Member of the Metal Window Association



Metal Windows

Wallspan Curtain Walling

Metal Doors



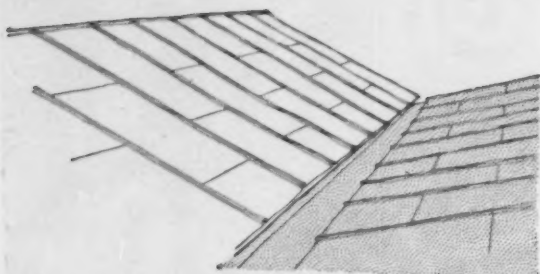
Aluminex

Metal Door Frames

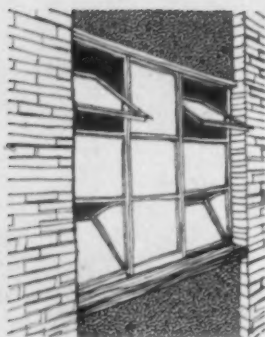
Rooflet Toilet Cubicles

BRABY *metal products*

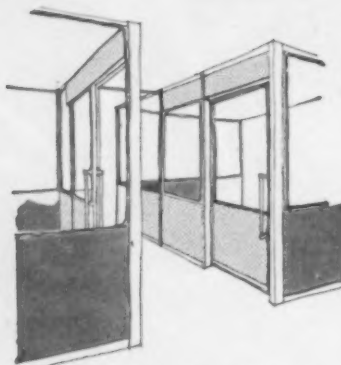
for Building



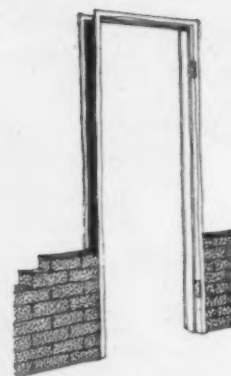
Copper roofing



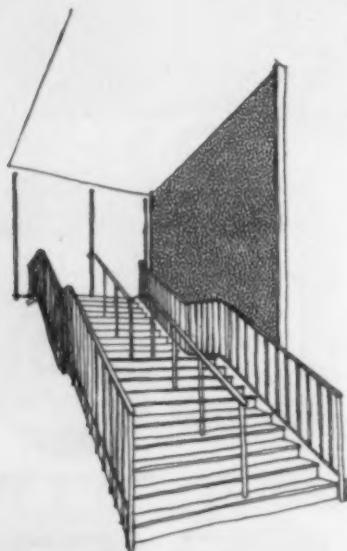
Metal windows



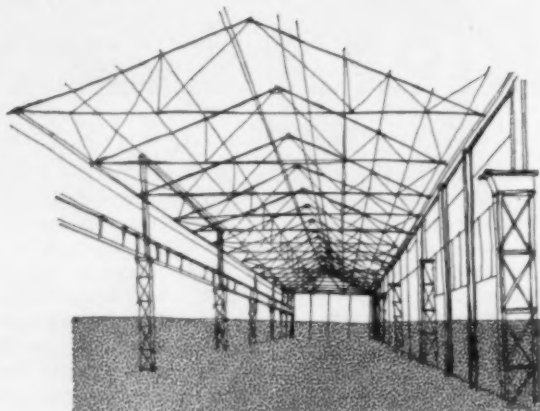
Metal partitions



Pressed steel door frames



Pressed steel stairs



Structural steelwork

Full details on application

SOME OF THE WIDE RANGE OF

BRABY

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*"This paper clip
saved me
10/-
a day"*



"I was much too busy to read through the letter and it soon got covered up by other mail. But that evening I found it accidentally clipped to some important documents which I had taken home to study.

It was about a new-style dictating machine, the Dimafon, which has just come on to the market in this country. This letter detailed specific ways in which the Dimafon could save 10-20 per cent of my time, money and temper — and 50-60 per cent of my secretary's. It asked me to test the Dimafon against any other make of machine — to prove for myself which gave the best value for money. Suddenly I realised that a good dictating machine could be a really useful investment.

So I decided to see for myself and test the Dimafon for 14 days. Results were interesting. My secretary and I figured out that it saved us 10/- a day during the trial period; it paid for itself in a few months."

But why don't you try the Dimafon yourself for 14 days, without obligation.

See if it doesn't save your time, money and temper. It's so easy.

Just write your name and address on the white space at the side of this advertisement; or send your letterhead to:—



27 CRAVEN ST., NORTHUMBERLAND AVE., LONDON, W.C.2

They will meet you at any time. Their 'phone number is TRA 6655



BEACON



**now
available
at
LOWER
PRICES**

STEEL DOOR FRAMES

Hitherto, the standard range of Beacon Steel Door Frames have been made of 16g sheet steel. Following the news that most of the larger American Door Frame Manufacturers had changed over to 18g steel, we have carried out a series of experiments both in our Research Laboratories and on a building site, to discover whether the lighter gauges would be suitable for use in this country.

These experiments have shown that the lighter frames are of ample strength, and experience both in transport and "building in" have satisfied us that they are not liable to distortion during erection.

We, therefore, offer a complete range of 18g Door Frames identical in all other respects with our 16g range, at lower prices.

JOHN THOMPSON BEACON WINDOWS LIMITED

W O L V E R H A M P T O N

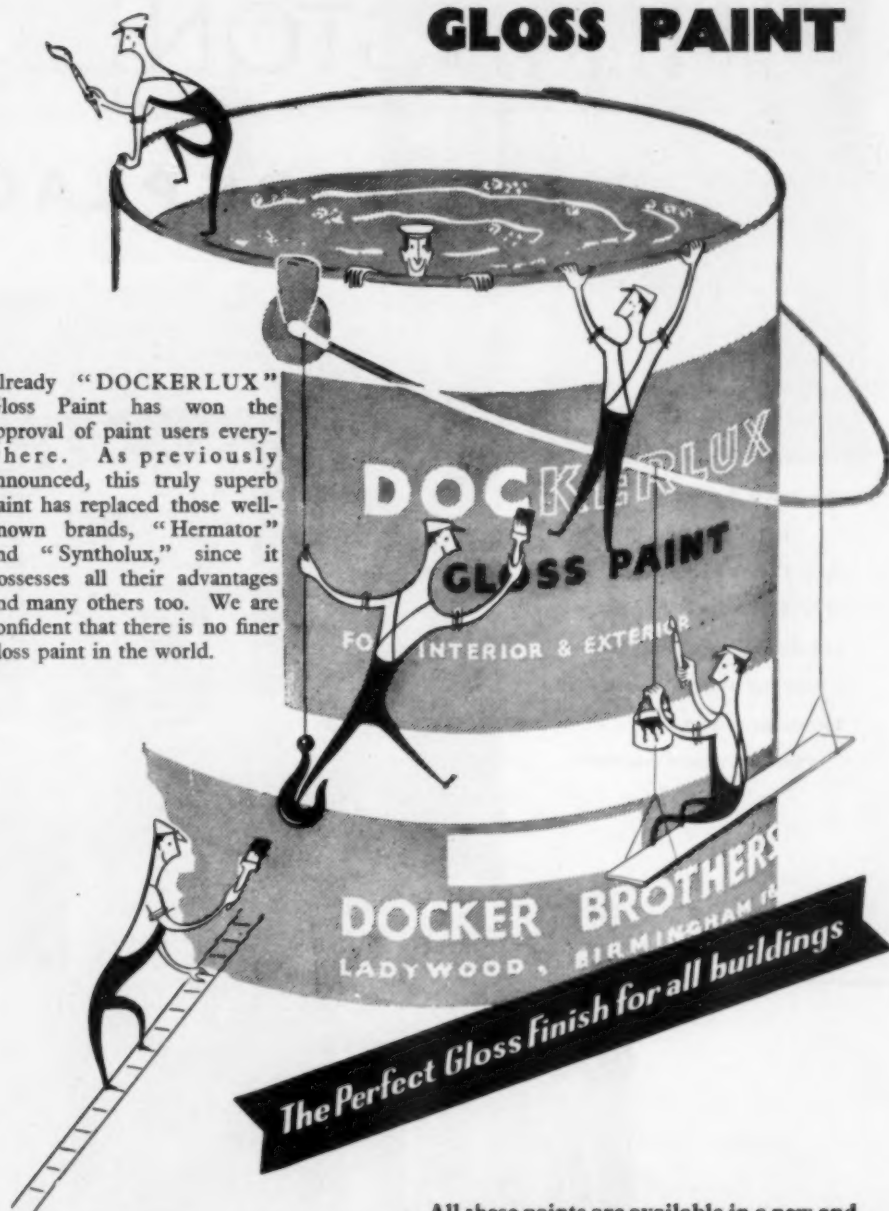
Members of the  Metal Window Association

An instant success.

DOCKERLUX

GLOSS PAINT

Already "DOCKERLUX" Gloss Paint has won the approval of paint users everywhere. As previously announced, this truly superb paint has replaced those well-known brands, "Hermator" and "Syntholux," since it possesses all their advantages and many others too. We are confident that there is no finer gloss paint in the world.



All these paints are available in a new and attractive range of modern colours and full details will gladly be sent on request.

DOCKER BROTHERS, LADYWOOD, BIRMINGHAM 16. London Showrooms 17 Berners St., W.1.

P.S.

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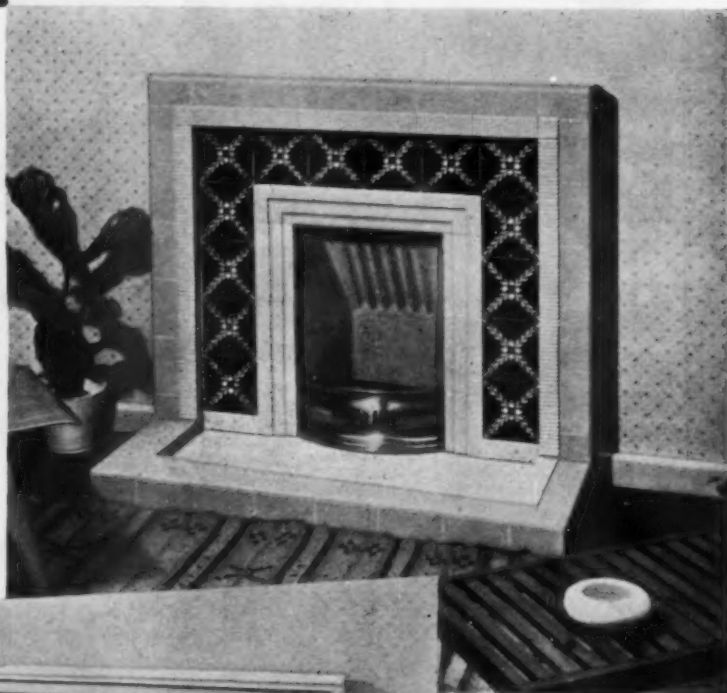
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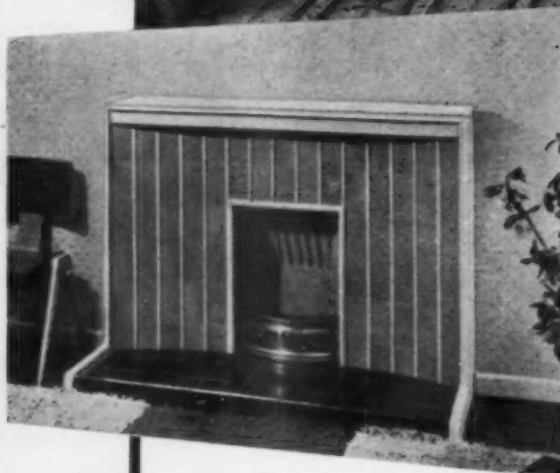
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So well designed are Pilkington
fireplaces that people not only
like them at first sight but never
tire of their neat, distinctive
lines. There's a wide choice
of tiled fireplaces for traditional
and contemporary homes and
every one is soundly constructed
by craftsmen, from
Pilkington's world famous tiles.



Design No. F2834



Design No. F2852

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A CONTEMPORARY FRONTAGE

in which full advantage is taken of height.

Obscure glass panels run from floor to ceiling

divided by vertical fins of polished teak.

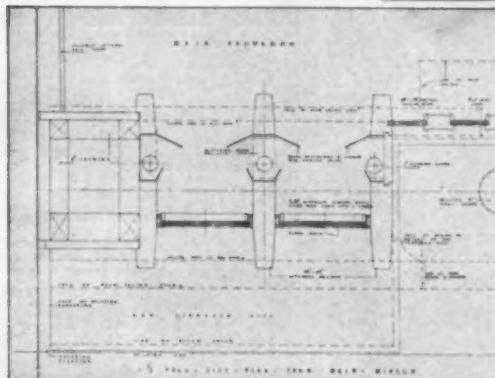
Concealed lighting incorporated in these mullions

is reflected on to the glass.

The hardwood entrance door makes

a pleasing contrast to the alternate glass

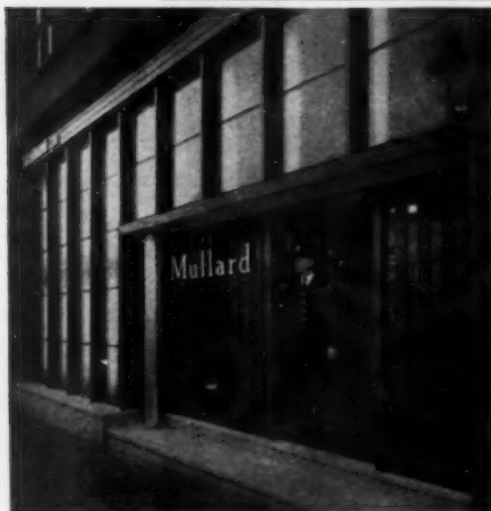
and polished wood slat side-wings.



Architect: Ronald Greaves, A.R.I.B.A.

Designed by Rapier Design Ltd.

Director of design Eric Sharvell.



Installed by

POLLARDS

E. Pollard & Co Ltd

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better looking,
longer lasting,
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an essential part of the service offered—is the complete erection by our own skilled labour. The services of our own Surveyors and Drawing Office are also readily available to Architects, Municipal Authorities, and others who are cordially invited to send for detailed information on 'Alborough' design and construction.

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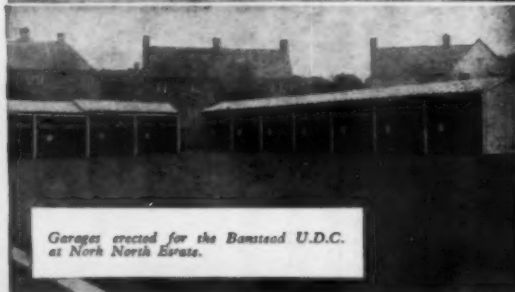
'Alborough' Garages (privately commissioned) all erected by step-site method, at Muswell Hill, London.



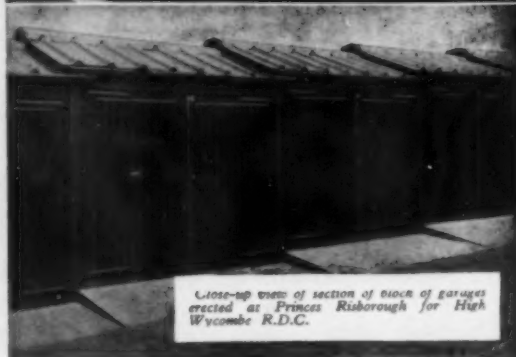
One of several blocks (privately commissioned) at Hurlingham, London.



Garages at Fordmill Road, Bellingham. Erected for the London County Council. Note special back to front roof slopes.



Garages erected for the Banstead U.D.C. at North North Estate.



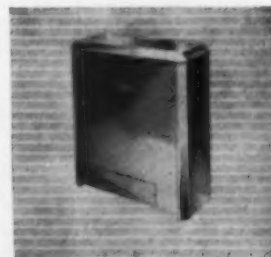
Close-up view of section of block of garages erected at Princes Risborough for High Wycombe R.D.C.

*Cold going to work**Warm premises when they arrive**Warm all through the day*

The Nightstor Heater is a most economical way of heating offices, school-rooms, workrooms and most commercial buildings. It stores heat at night, when cheaper electricity is available. A Nightstor installation is entirely automatic. It provides comfortable working temperatures throughout the day.

The Nightstor Heater is available in three sizes. Write for descriptive leaflet Ho2482.

Nightstor heater a **S.E.C.** product
stores heat at night
for use next day

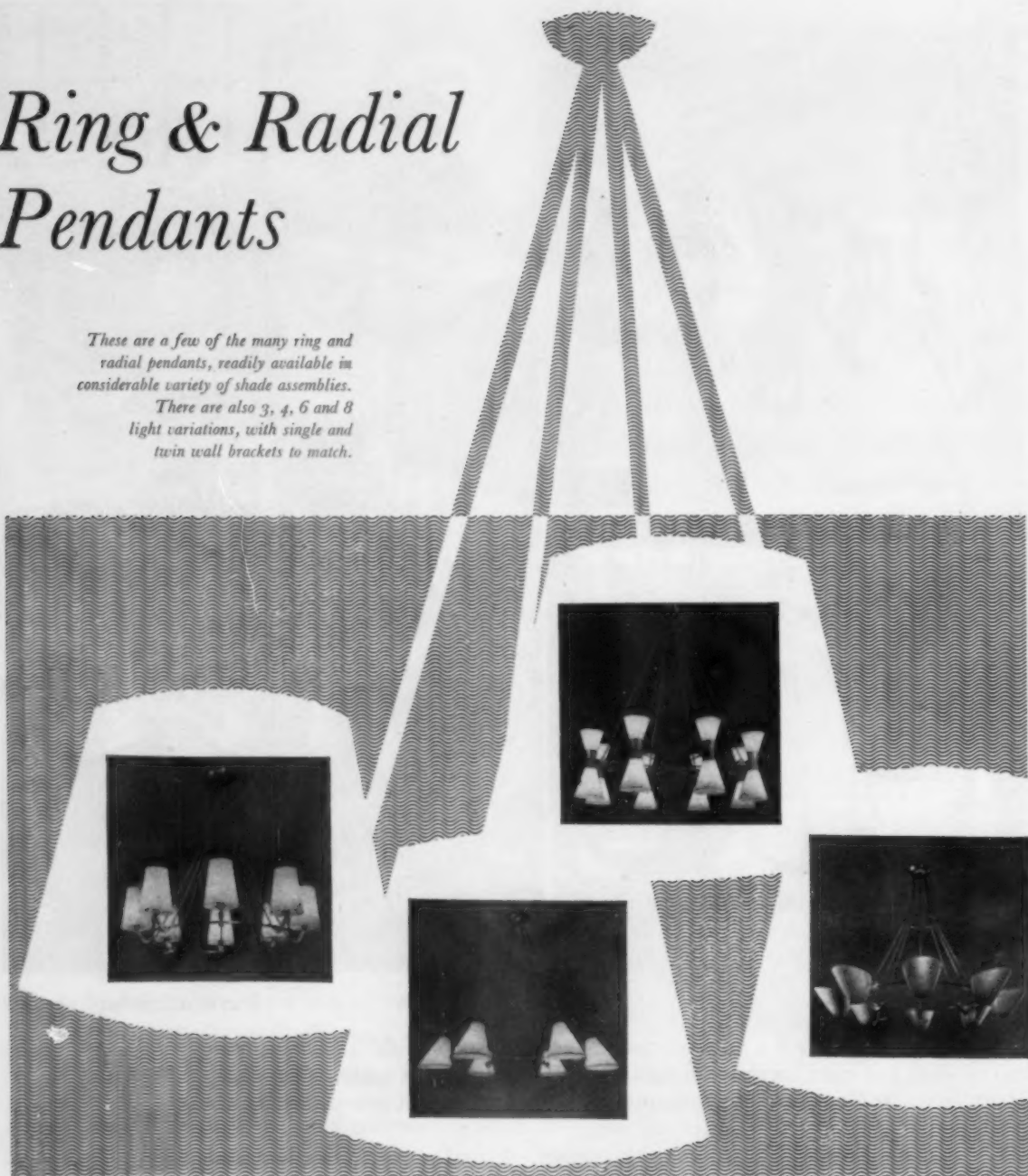


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Ring & Radial Pendants

These are a few of the many ring and radial pendants, readily available in considerable variety of shade assemblies.

There are also 3, 4, 6 and 8 light variations, with single and twin wall brackets to match.



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Manufacturers of Utralux, Versalite, Tubalux and Mondolite Lighting Fittings.

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Versatile PLIMBERITE



It's amazing in how many ways Plimberite can be used



GENERAL CHARACTERISTICS

Wherever building is being done there is an important job for Plimberite. In offices, factories, homes, schools, hospitals, Plimberite is speeding progress and cutting costs.

This resin-bonded wood chip-board can be sawn, drilled or jointed with any standard hand or machine tool. Having greater resistance to spread of flame than timber, it is classified as FLAMEPROOF. Under normal conditions, moisture movement is negligible, and Plimberite is immune from all wood destroying insects except termites. Tests carried out by the D.S.I.R. and the F.P.R.L. prove the stability and strength of Plimberite.

Building costs reduced — no bracing or extra studding is required, no knots, no variance from board to board. Decoration is as for timber.

STOCKISTS

There is a Plimberite Stockist in your area. Addresses will be sent on application.

TECHNICAL DATA

Size: 8 ft. x 4 ft. Thicknesses: $\frac{1}{2}$ in. and $\frac{3}{4}$ in. Thickness tolerance: plus or minus $\frac{1}{16}$ in. Density: 60 lbs./cu. ft. Weight per square foot: $\frac{1}{2}$ in. = 2 lbs., $\frac{3}{4}$ in. = 3 lbs. Strength: Using test pieces 6 in. x 4 in. on bearers at 6 in. centres, with a load applied at mid-span, the mean breaking load is: $\frac{1}{2}$ in., 750 lb.; $\frac{3}{4}$ in., 300 lb. Moisture content: 9% to 11%. Resistance to spread of flame: (1) B.S. 476/1932: Class III (i.e., better than timber). (2) Approved by the London County Council as "Flameproof". Thermal conductivity: K = 0.90. Acoustical reduction factor: 26 decibels. (Mean value for range 100 to 3,200 c.p.s., $\frac{1}{2}$ in. material). Sound absorption coefficient: 0.20 (Mean value for range 125 to 4,000 c.p.s., $\frac{1}{2}$ in. material).

TECHNICAL ADVISORY SERVICE

Trained technicians are always available to help solve any problem which may arise. This service is given without obligation.

APPLICATIONS

Supplied in thicknesses of $\frac{1}{2}$ in. and $\frac{3}{4}$ in., Plimberite is ideal for:

PARTITIONING ROOF DECKING
SUSPENDED AND SOLID FLOORS BUILT-IN FURNITURE
PANEL AND FLUSH DOORS SHELVES
DISPLAY CABINETS SHOP COUNTERS
VENEER CORE EXHIBITION STANDS
SHUTTERING

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Telephone: RELiance 4242

PLIMBERITE
BUILDING BOARD

NEW WORLD WATER HEATERS

FOR NEW BUILDINGS AND CONVERSIONS

A complete hot-water supply system suitable for fitting under the draining board



The universal demand for a complete hot water service which is reasonably priced, easily fitted and economical to use, has turned the attention of Architects and Municipal Authorities to the **NEW WORLD** Gas Storage Systems—

As an example, the **NEW WORLD** C.12S. Circulator, fitted to a lagged 20 gallon cylinder, can be accommodated under the draining board in the kitchen. With the Economy Valve the user has the choice of heating 4 gallons for the sink and wash basin or 20 gallons when a bath is required. The temperature of the water is automatically controlled by the Regulo. If ventilation in the kitchen is adequate no flue is needed. This installation is being extensively used in new houses and flats, and for the modernising and conversion of old property.

A similar type of installation is available for use in an airing cupboard; and when the house contains no ball valve cistern, a combination unit complete with cistern mounted on the cylinder can be supplied. The **NEW WORLD** Circulator can also be used as an auxiliary to an existing solid fuel system and is available in three sizes, the largest of which is suitable for schools and institutions.

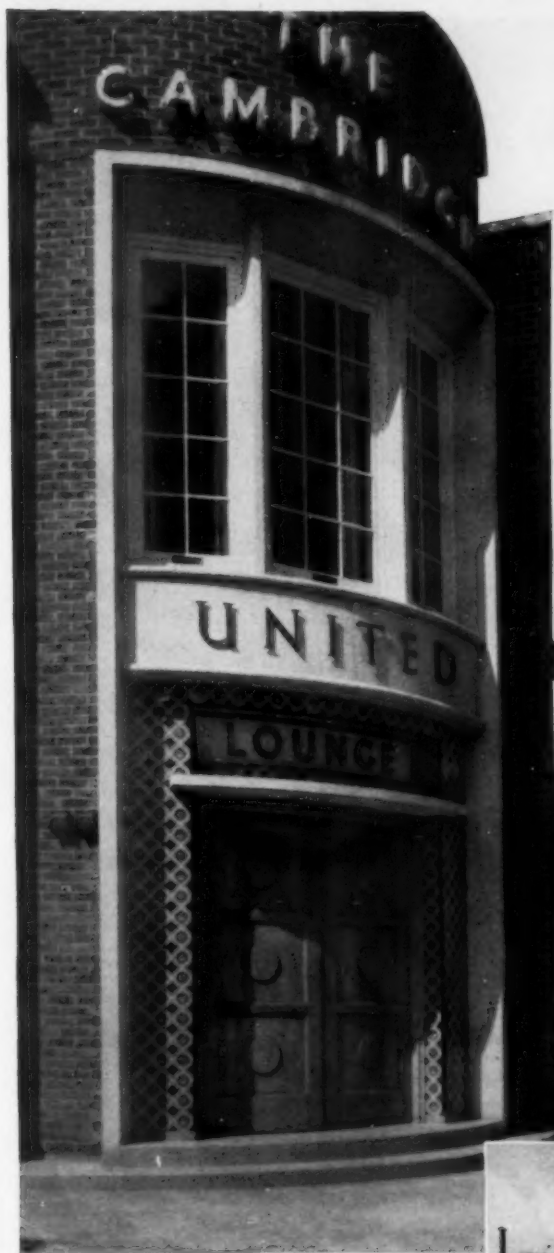
NEW WORLD Storage Water Heaters provide hot water at the same temperature, Summer and Winter—they can normally be operated on the existing Gas and Water Services and require a minimum of maintenance.

→ **recommend**



gas storage water heaters

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Telephone: MAYfair 6462



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Architect: K. Hornsey L.R.I.B.A.

Empire Stone Co. Ltd.

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Berkeley House, Birmingham 16

Narborough, Nr. Leicester

324 Deansgate, Manchester 3

Empire Stone

was used in this new

hotel for the Portsmouth

and Brighton United Brewers

at Southsea



Be right with

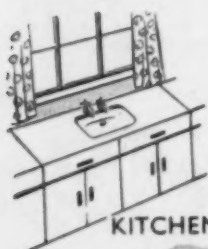


AT HALF THE PRICE
the new amazing

**PLASTIC
FACED
BOARD**



IDEAL FOR



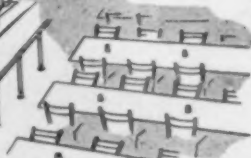
KITCHENS



BARS



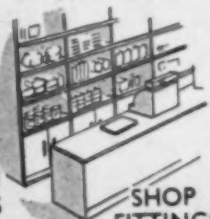
COUNTERS



CANTEENS



KITCHEN
FITMENTS



SHOP
FITTINGS

★ FOR SAMPLES AND FULL INFORMATION WRITE DEPT. A.B.N.

REMEMBER the name **BERITE**. You'll be asked about it often from now on, for this plastic board, at a startlingly reasonable price, is unbeatable for—

● **WEARABILITY !**

The Plastic Face is washable, resistant to heat, alcohol and water. Can be cleaned by merely wiping. (Ideal for Shops, Fittings, Counters, etc.)

● **COLOUR APPEAL !**

In any of five linen pattern shades : pink, blue, grey, green, buff.

● **ALL-ROUND CONVENIENCE !**

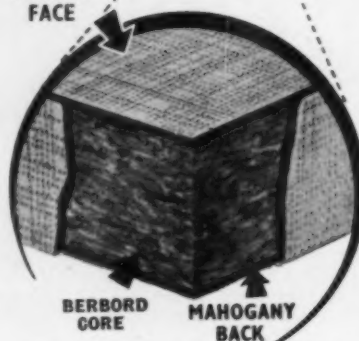
BERITE can be cut, worked, drilled, nailed and screwed with ordinary tools. Its convenient thickness ($\frac{1}{8}$ " or $\frac{3}{8}$ ") saves plywood, bonding, etc.

STOCK SIZE SHEETS

8ft. x 4ft. and 4ft. x 4ft.

FROM YOUR
MERCHANTS AND STOCKISTS

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FACE**



**BERBORD
CORE**

**MAHOGANY
BACK**

Hardwood, Berlam or other suitable Edging, as applied by consumers. Already bonded to a $\frac{1}{8}$ " and $\frac{3}{8}$ " backing at amazingly low prices.

And **BERLAM**, a plastic-finished sheet is obtainable separately—again at exceptionally moderate prices !

Both **BERITE** and **BERLAM** respectively are offered at prices, to the best of our knowledge, far cheaper than any comparable material on the market to-day.

BERITE LTD

Lammas Road · Lea Bridge Road · London E.10

Falkirk hat trick at London Airport

The whole London Airport new-building scheme is awe-inspiring in its vastness and luxury. It is estimated that, by 1960, London Airport may well be coping with 3½ million passengers a year . . . about 9,500 each day. Every provision is being made for the comfort of passengers and staff . . .
... and that's where Falkirk comes into the picture . . .



1953

FALKIRK proudly announced that the Ministry of Civil Aviation had awarded to them the contract for the installation of cooking equipment in the impressive Control Tower—a kitchen serving two canteens.



1954


Once again, FALKIRK was specified: this time for another gigantic task. Cooking equipment for the passenger building which involves . . .

* on the first floor: a transit restaurant, a lounge and buffet bar, and a nursery.

* on the second floor: a restaurant for spectators, a buffet and licensed bar, a staff snack bar and beer garden.

* on the third floor: a cafeteria restaurant, a tea room and yet another bar!

* all these with serveries connected by a battery of lifts to the main kitchen on the ground floor.



1955

Hat trick complete

And now, Falkirk is proud to have been awarded the contract for the installation of their equipment in the third huge London Airport building for the use of spectators, aircraft captains and crews.

N.B. To architects and others concerned with cooking equipment:
"Modesty forbids, but perhaps . . . we admit . . . there might be a very good reason for our Hat Trick."

Whatever the fuel, whatever the size of your problems, Falkirk are delighted to give advice.

Client: Ministry of Transport & Civil Aviation (Air Ministry, Director of Works)

Architect: Frederick Gibberd, C.B.E., F.R.I.B.A., M.T.P.I.

Consulting Engineer: Sir William Halcrow & Partners

Main Contractor: Taylor Woodrow Construction Ltd.

FALKIRK

HEAVY DUTY COOKING EQUIPMENT

The Falkirk Iron Co. Ltd.

(Proprietors: Allied Ironfounders Ltd., makers of cookers, boilers and fires)

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*Personal Hygiene and
Public Health
demand. . . .*



This Pedestal Model
No. 3706 is one of
the range of SUGG
Incinerators Gas-Fired
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upon request

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VINCENT WORKS, REGENCY STREET, LONDON, S.W.1. Tel: VICTORIA 3211 (4 lines)





Murphy Radio Ltd., Welwyn Garden City.

Architect :—C. W. Hutton, A.R.I.B.A.

NEARLY 50,000 SQUARE FEET OF "WARNERSON" ALUMINIUM PATENT GLAZING
ERECTED IN THIS OUTSTANDING FACTORY APART FROM THE IMPRESSIVE VERTICAL
GLAZING IN THE BOILER HOUSE WHICH RISES TO AN UNSUPPORTED SPAN OF 28 FEET.

**ARCHITECTS ARE SPECIFYING 'WARNERSON' DOUBLE PATENT
GLAZING BECAUSE OF ITS UNIQUE AND PATENTED FEATURES**

★ **INSULATION**

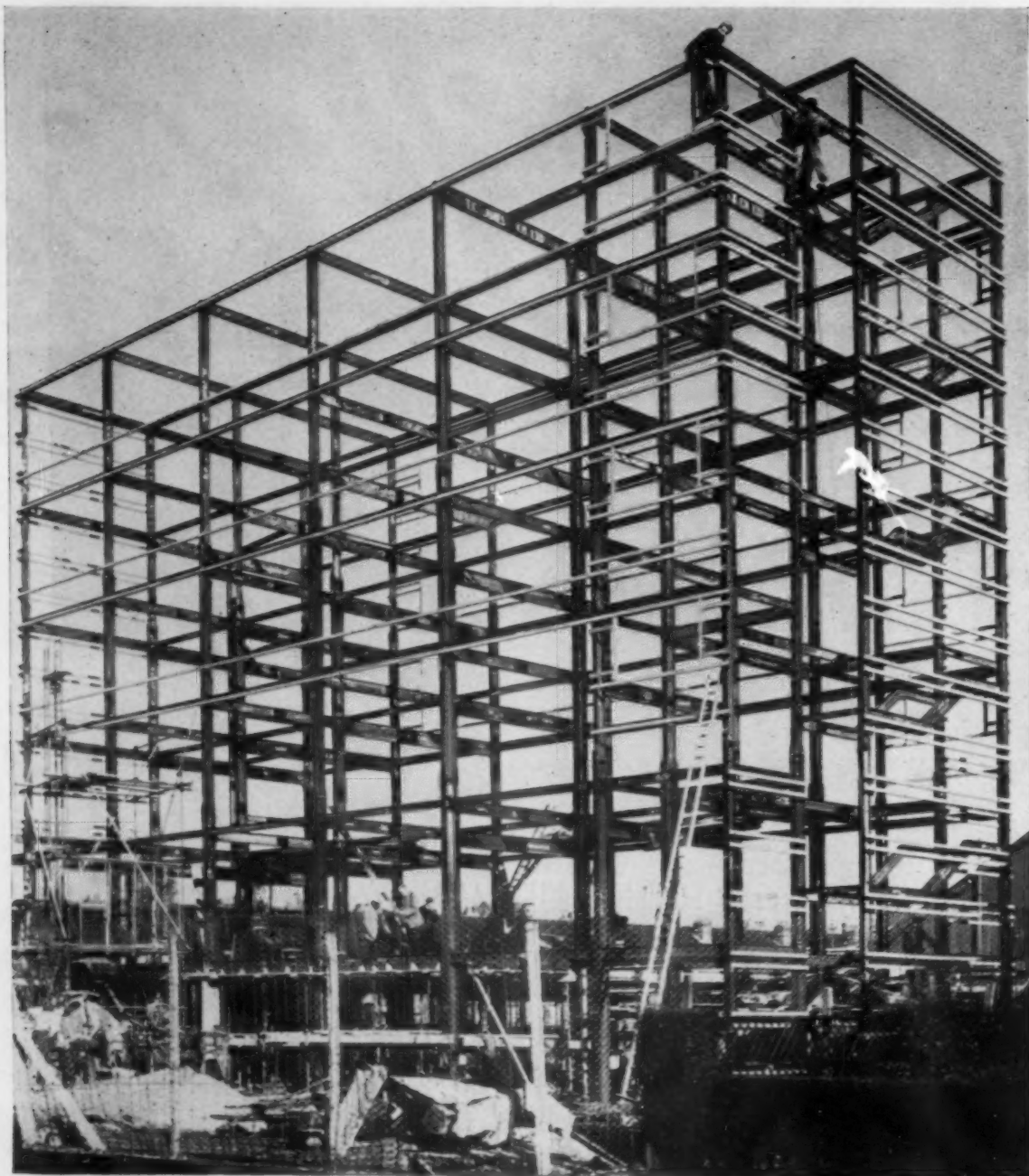
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(5 lines)**



Factory for Electronic Instruments Ltd., Richmond, Surrey

This is a C.A.S. (Developments) Ltd. development. Architect: KENNETH ANNS, M.C., F.R.I.B.A.
 Consulting Architect: A. B. WATERS, M.B.E., G.M., F.R.I.B.A.
 Consulting Engineers: ANDREWS, KENT & STONE. Contractors: C.A.S. (Contractors) Ltd.

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T.C. JONES
AND COMPANY LIMITED



Wood Lane, London, W.12. Tel: SHEpherds Bush 2020. Bute Street, Cardiff. Tel: Cardiff 28786. Treorchy, Glamorgan. Tel: Fentre 2381

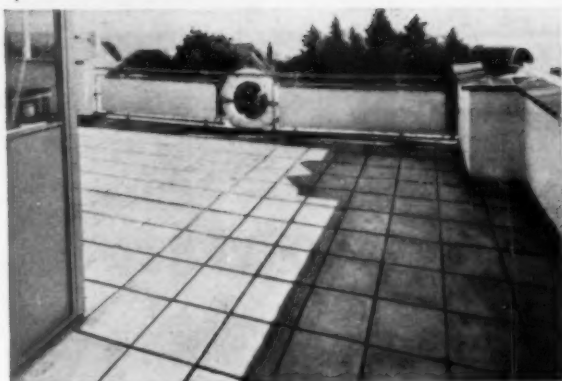
★ THE RUBERDAL ROOF ★



1



2



3



4

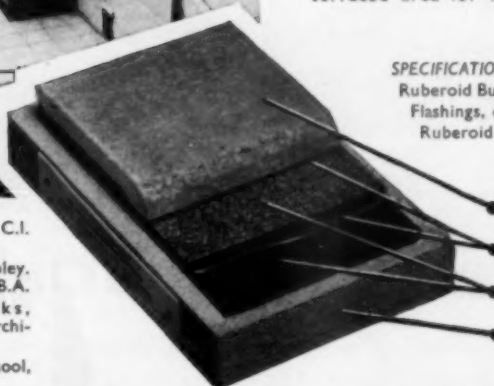


5

1. West Park Pavilion, Jersey, C.I. Architects: Blampied & Biggar.
2. Sports Pavilion, North Wembley. Architects: Duke & Simpson, F.R.I.B.A.
3. "Showboat," Sandbanks, Bournemouth. Residence of the Architect, A. J. Seal, Esq., F.R.I.B.A.
4. Latymer Foundation Upper School, Hammersmith. Gymnasium Roof. Architects: Chesterton & Sons.
5. Balcony at United Club, Jersey, C.I.

A Ruberoid Built-up Roof surfaced with Ruberdal Tiles is permanent, fire-proof roofing which adds substantially to the amenities of private residential buildings and public structures. A Ruberdal Roof, which is suitable for chairs or heavy foot traffic, provides an attractively terraced area for leisure and recreation.

SPECIFICATION N.3. The flat roofs to be covered with Ruberoid Built-up Roofing, surfaced with Ruberdal Tiles. Flashings, eaves and verges to be in accordance with Ruberoid Standard Details.



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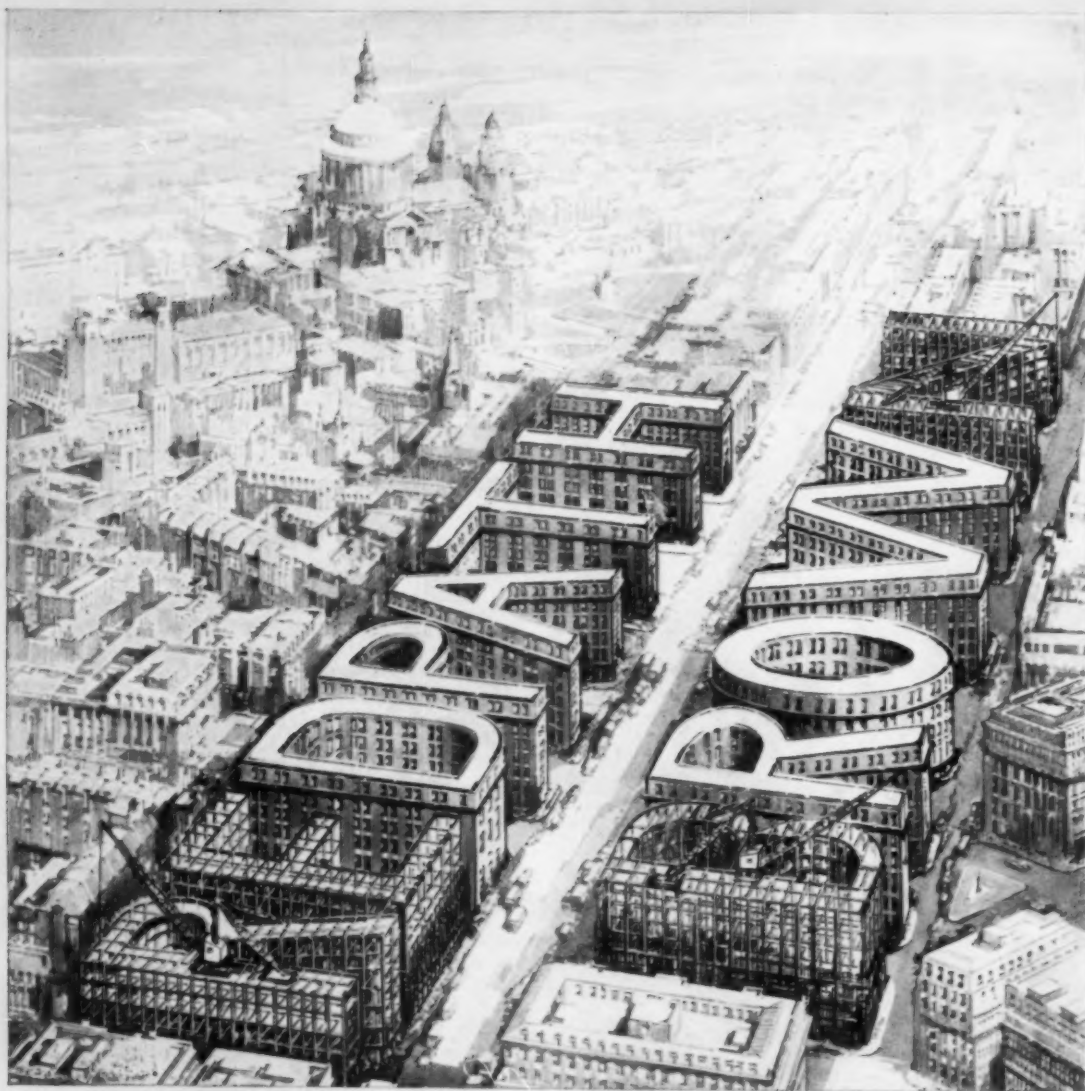


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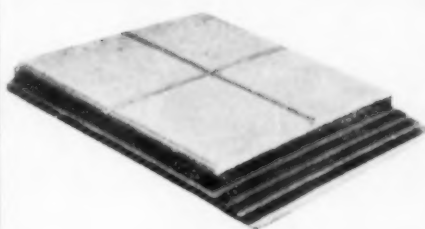
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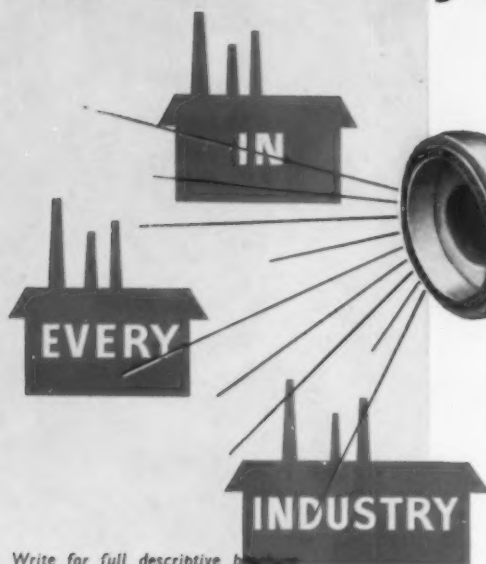


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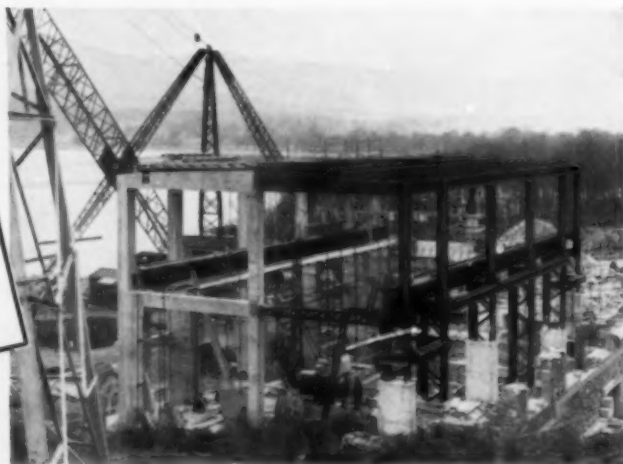
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6 *fresh views on flooring*

expressed by

OLIVER COX (in this issue)

FELLO ATKINSON

HUMPHREY SPENDER

F.H.K. HENRION

PRUNELLA CLOUGH

LAURENCE SCARFE

and edited by

Sir Hugh Casson R.D.I., M.A., F.R.I.B.A.

In seeking a theme for a series of features on flooring as an integral element of interior design, the manufacturers of Semastic Tiles commissioned Sir Hugh Casson to make his recommendations. He proposed that a number of leading designers be given the opportunity to express their views on this matter by designing floors for a number of imaginary projects which he himself would suggest by way of initial plans and briefings. He has, therefore, in association with these designers, prepared plans for: an Airport Waiting Lounge

a Youth Hostel Dayroom · a Works Canteen
a Restaurant · a Clinic · a School Entrance Hall
Each of the six designers selected has been invited to choose one of these projects and to consider it from the aspect of floor-design in order to demonstrate the scope of Semastic Decorative and Vinyl Asbestos Tiles. The materials which may be used are as follows:

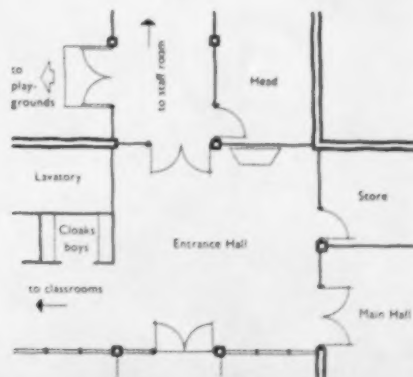
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THE PROBLEM AS SET TO OLIVER COX

The floor of an Entrance Hall to a new Infant School in a suburban or rural neighbourhood is to be designed, and the terms of reference are as follows:

(a) The hall will be rectangular in plan, extended visually by fully glazed doors facing to the outside and along the corridors of the school. (b) The nature and function of the hall is such that it will be used constantly by visitors, parents, staff and children. Hence, it must extend an atmosphere of welcome that will be suitable to both child and adult. (c) Preference will be given to the bold use of simple shapes and strong, clean colours.



3

OF SERIES

Oliver Cox

SCHOOL

ENTRANCE HALL



The School Entrance Hall, showing the Semastic Tile floor and its surroundings.

The area chosen is the Entrance Hall to an Infant School—an area between eight and nine feet high and some twenty-five feet square in extent. This hall is used by children, teachers and visitors. The classrooms, with cloak-rooms in the corridor itself, are to the left of the picture with the staff rooms off the corridor in front. The main hall adjoins the entrance hall on the right.

The construction of the school is prefabricated with standard steel columns and beams painted generally white or neutral grey acting as a framework for the bold colours applied to wall surfaces. As the entrance hall is a focal point on which several corridors converge, strong colours have been applied on the walls so that they may be seen at some distance and provide a positive 'end' to the corridors. As it is an entrance in a new school it need no longer be a haughty, draughty area designed to impress the parents and important visitors, and out of bounds to the children. It is, instead, the centre of the school, a scene of bustle and activity, through which the children, teachers and visitors will all pass to reach the classrooms, the staff rooms and the hall. The atmosphere should be gay and welcoming and in key with the movement and brightly coloured clothing of the children.

This suggested the use of some near-primary colours in the Semastic Tile

floor—but not so strong, so isolated in area or so contrasting as to worry the eye and trip you up. These stronger colours were enclosed therefore by a more sombre background of middle-tone colours in order to lessen the contrast. Various shades of olive green were chosen here as a good foil to the primaries and in order to tie the whole floor together.

Also, by using a number of slightly different tones of the same hue in the background colour it was possible to introduce a secondary level of interest between the sombre colours and also to soften the pattern by making the eye less conscious of the angularity of the shapes. In order to achieve a 'glow' or feeling of welcome a strong, warm, yellow bias was given to all the colours.

The pattern was designed to provide a fairly even overall framework to tie in the bold colours to the flat surface, and to intensify the feeling of the floor as a separate plane from the walls—just as the different wall colours used make changes of wall plane more apparent. The shapes arrived at by adding a few 9" x 9" Semastic Tiles together to form a repeat pattern soon tend to become too large and dominating for so relatively small an area; hence any

formal or repetitive pattern was avoided. This particular pattern illustrated seemed to give a sense of continuity without being dully repetitive and had the further advantage of being adjustable to any particular shape or size of hall.

Sir Hugh Casson sums up

In this exercise Oliver Cox, by his use of near-primary and middle-tone colours, has created an effect that is gay and welcoming, yet not distracting to the eye. The entrance hall, instead of being a vacuum into which corridors and passages empty themselves become a hub from which the rest of the building starts. The angularity of the simple, bold design is softened by the use of sombre olive green tones which are in turn relieved by a 'feeling' towards yellow in the overall design. The whole effect is one that would tone well with the busy to-and-fro traffic to which the hall would be subjected.

Reprints of this series can be obtained from:
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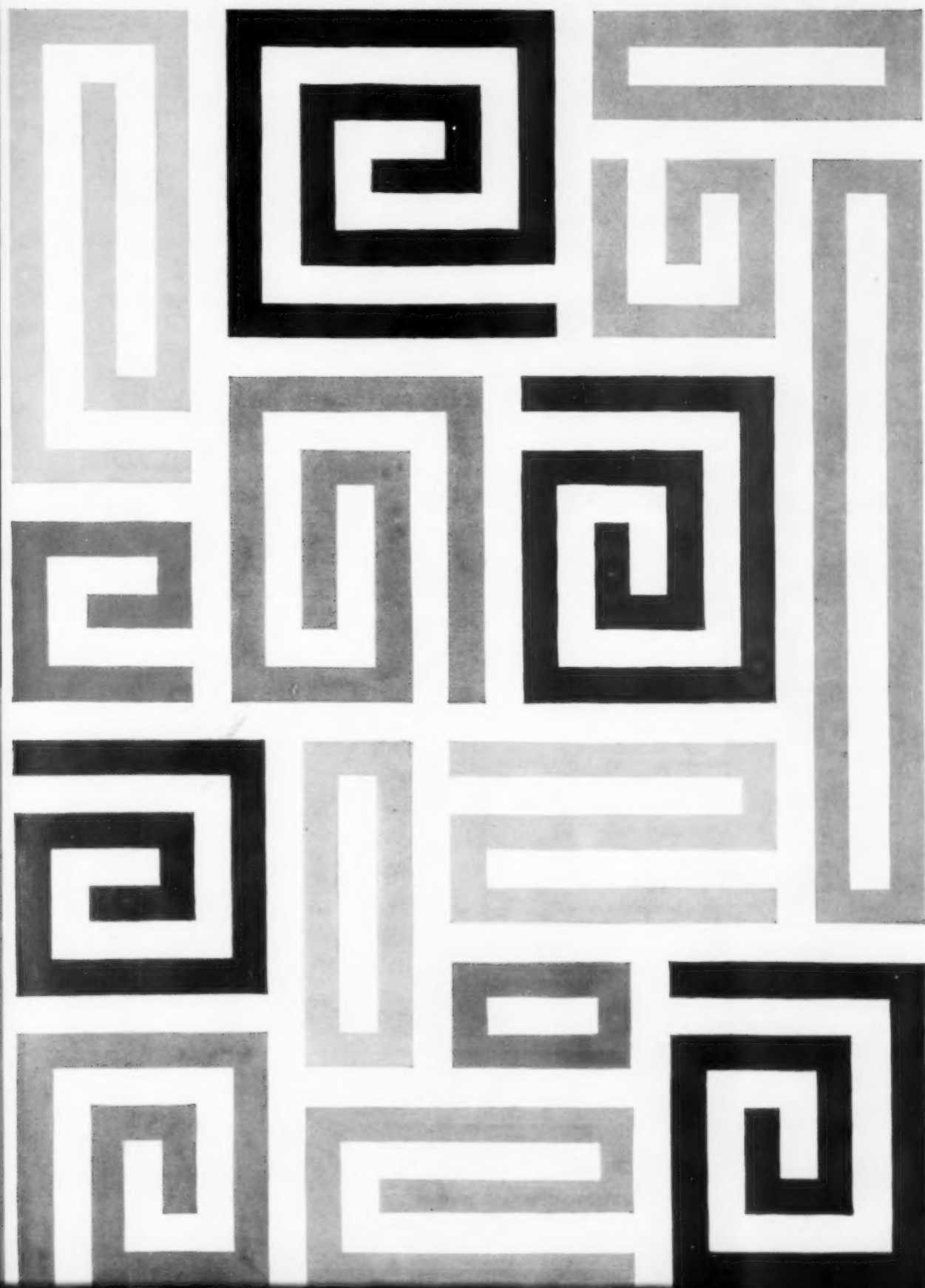
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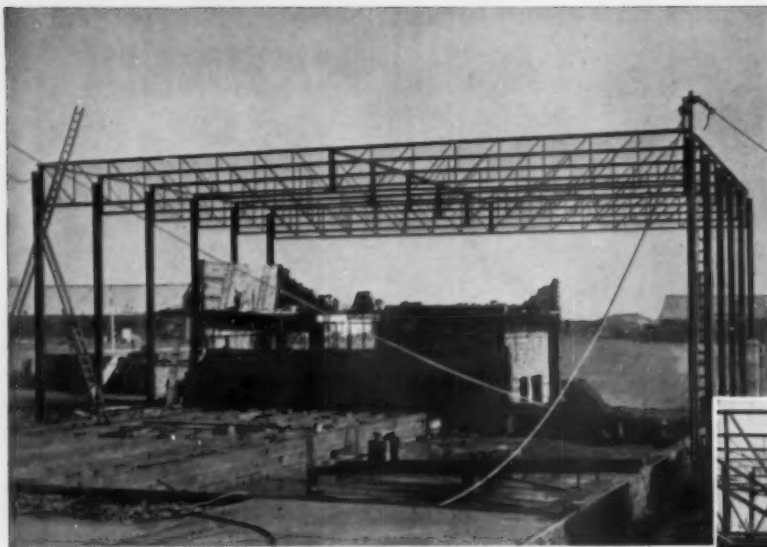
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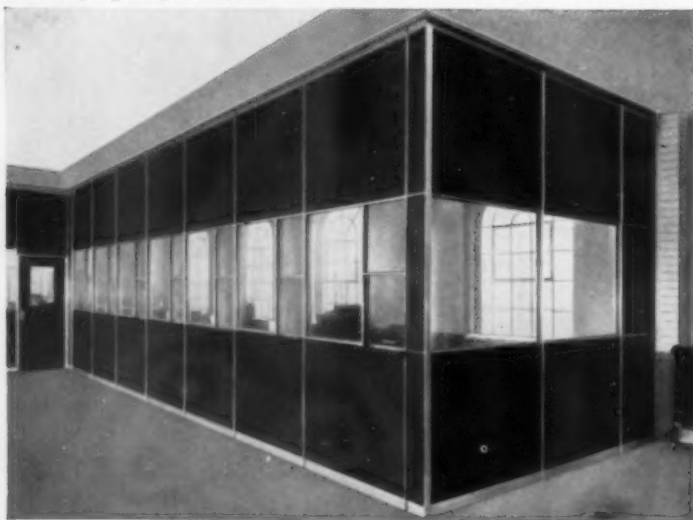
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THE ARCHITECT & BUILDING NEWS

19 May 1955

The "Architect and Building News" incorporates the "Architect," founded in 1869, and the "Building News," founded in 1854. The annual subscription, inland and overseas, is £2 15s. 0d. post paid: U.S.A. and Canada \$9.00

Published by ILIFFE & SONS LTD., DORSET HOUSE, STAMFORD STREET, LONDON, S.E. 1
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SCYLLA AND CHARYBDIS

WHEN the R.I.B.A. sent out to members last year's questionnaire, it was stated that "There is an appreciable degree of dissatisfaction among architects in salaried employment with the existing bodies concerned regarding their representation in negotiations affecting their conditions of service and salaries. . . . If there is a substantial demand for more effective representations it must be met by some organization outside the Royal Institute but having its support and good will."

But in the letter in January of this year members were advised to join "an existing organization appropriate to their particular field of employment," and the Royal Institute refused to single out any one existing organization for preferential support, while proceeding "actively to explore alternative means of attaining the agreed objectives of improving and strengthening the conditions of employment of salaried architects in all classes of employment."

At the A.G.M. as everyone knows the following resolution was carried by 224 votes to 87.

"That this Annual General Meeting of the Royal Institute of British Architects does not support the Council's decision concerning the representation of members and students in salaried employment as set out in their letter of the 4th January. It instructs the Council to reconsider their decisions and bring forward fresh and definite proposals in line with the majority opinion of those who replied to the questionnaire."

Speakers opposing the motion argued that the interests of members were best served by the Royal Institute remaining independent, since its prestige with Government and public was high, but "If it were known that, associated directly with the Royal Institute or sponsored by or directly supported by the Royal Institute, there was a single negotiating body, there is no doubt that our independent powers would be weakened."

Supporters of the motion argued that on the con-

trary what damages the profession as a whole is the existence of a badly paid and inadequately recognized section of it, wherever that may be, either among the majority of the profession who are salaried, or among those who draw fees on the R.I.B.A. scale.

"The R.I.B.A. has control of its scale of fees," said one speaker, "which it can revise at any time and does revise from time to time. What surely we want in the interests of both sections of the profession is an effective control of salaries. This can be provided only by a trade union working closely with the R.I.B.A."

This motion by a section of the salaried assistants must be seen against the general economic background. It reflects the anxiety felt by many professional and middle-class people who fear that in the struggle to equate income with the cost of living they will have no representation comparable with the *force majeure* of powerful trade unions, and that without equivalent organization their standard of living will progressively decline.

To balance the scales evenly the Council of the R.I.B.A. advised membership not to join any break-away groups of private architects. Again in the interests of unity.

The problem they have to face is how much more will public and private clients pay for the architect's services. Is there a risk that if the fees are raised and salaries increased that the volume of work will shrink?

It requires nerve backed by the conviction that the architect's services to the community are worth what he asks for them. Architects are not mercenary. The majority of them deserve to earn more in the light of their expensive training, the responsibility they carry and the long hours they toil. If young salaried architects are forced to work overtime on outside jobs to make both ends meet, the prestige of the profession will suffer.

The long-term objective is to make the cost of

building cheaper while being more efficient. This aim is much more capable of achievement by well-paid people working in good conditions. The position as a result of the A.G.M. can be summed up in our opinion by the concluding words of the mover of the resolution, Mr. Thurston Williams.

"If the Institute uses its influence in setting up a single organization which can represent the salaried architect, then the status of the profession can be raised, because if we raise the status of the salaried architect, who forms the majority of our members, we can raise the status of the whole profession . . .

"We are, therefore, asking the Council to think again. Much of the work of the Salaried and Official Architects Committee is of great value. We are asking the Council to make use of it."

EVENTS AND COMMENTS

ON LOCATION

Films of the great outdoors are seldom what they seem. The story of adventure and treachery on the North-West Frontier with the hero firing a water-cooled Vickers gun from the hip was not shot in the Khyber Pass but near the Pen-y-Gwryd hotel in Snowdonia; Alexander the Great has recently been cutting the Gordian knot in Spain instead of Asia Minor, and now I hear that the final scenes of the film *Bhowani Junction* are being shot not in India but in the Kingsway tram tunnel. I suppose the inside of a tunnel looks much the same anywhere, but the choice of the tram tunnel seems a little odd for it was altered at one stage in its career to accommodate double-decker trams. However, no one as yet seems to have thought of a better use for this unsaleable piece of property.

HOUSING, 45-55

The President of the R.I.B.A. yesterday opened this exhibition at the Building Centre. It is the United Kingdom contribution to the International exhibition of housing which is to be held at The Hague in July in connection with the IVth Congress of the International Union of Architects. The exhibition has been produced and paid for by the Building Centre from material chosen by the U.K. committee of the I.U.A.

The exhibition has been designed in accordance with the requirements laid down by the I.U.A. and consists of 20 standard panels. Some 26 schemes are illustrated by large photographs and site plans.

The I.U.A. is producing, for the congress, a book giving planning, technical and financial information on the various national contributions.

The Building Centre undertook to finance this exhibition when the R.I.B.A. was unable to make funds available for its production.

H.55 HÄLSINGBORG

The current issue of the Swedish magazine *Form* is almost entirely devoted to Hälsingborg. In spite of Swedish claims to the contrary it looks a dull town. (The Swedes make slighting remarks about Elsinore across the straits in Denmark, but I thought it a charming town.)

I hope we are not going to be wildly disappointed by the exhibition. *Form* illustrates models of a number of the buildings and they look rather unexciting. Nothing, except a gale and driving rain, can, however, completely spoil the setting of the main exhibition on a long, narrow pier running parallel with the shore. In the end, no doubt, the Swedish genius for planning out of doors will provide something well worth seeing, but there are no signs of anything that is likely to make the exhibition comparable with Asplund's revolutionary show of 1931.

THE G.P.O. AND LONDON AIRPORT

Some time ago I commented on the struggle between the Coventry City Architect and the Postmaster-General on the subject of telephone boxes. My picture shows a letter box recently installed at London Airport. No concession whatever is made to the architecture. To the G.P.O. a posting box is a posting box. Is it not time for a change of design for this type of setting? And, *must* we have the maker's name at the bottom?

ITALIAN INDUSTRIAL DESIGN

With the exception of a typewriter or two or a flashing-past Alfa Romeo, we see Italian industrial design largely at second hand in the shiny pages of *Domus*. We are shortly to be able to see a selection of products in the round, for the Italian Institute is putting on an exhibition

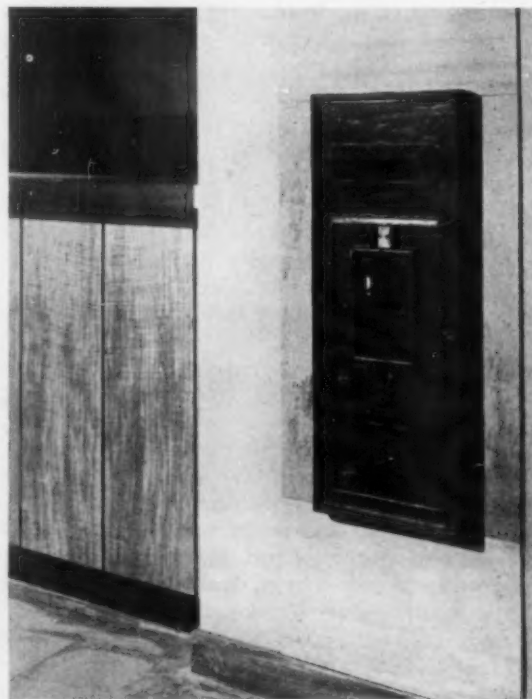


Photo: John McCann

at 39, Belgrave Square, from June 30 until July 30. The Exhibition will be opened, in the presence of the Italian Ambassador, by Sir Gordon Russell. About 30 objects will be exhibited and will include office equipment, cars, electrical equipment, light fittings, furnishings, textiles, pottery and glass, sanitary ware and leather goods. We may expect these to be pretty good. I would like to see them matched against 30 similar British objects. I believe we could hold our own.

ANOTHER DREAM HOUSE

There still seems to be endless scope for the designers of dream houses, at least in the eyes of women's page editors. In the past the architect was credited with the ability to design this chimera. He is not enough to-day for science, and the housewife must have a hand. The latest dream house—according to a woman correspondent—is to be the expression of a pool of ideas and experience of architects (plural), builders and research workers with the

co-operation of housewives (no fewer than 80 of them, with children). *It is hoped* that the experiment will be of use to architects and housing authorities throughout the country. I can hardly wait.

R.I.B.A. COLLECTION OF PHOTOGRAPHS OF ARCHITECTS' WORK

I am glad to see that the R.I.B.A. Council has decided to remove the restriction on the number of buildings which a member may submit each year for inclusion in the photographic record of members' work. The yearly maximum was previously two.

ARCHITECTS AND THE A.B.S.

About 16,000 registered architects refrain from subscribing to the A.B.S. each year. The Society relies on the remaining 2,000 and its friends outside the profession for its annual income. Is your face red?

ABNER

NEWS OF THE WEEK

The R.I.B.A. Letter to Members

We have received a copy of the following letter:

13th May, 1955

The Secretary,
Royal Institute of British
Architects,
66, Portland Place, W.1.

Dear Sir,
*R.I.B.A. and other professional
bodies.*

As a member of the R.I.B.A. I duly received your letter of 25th April.

I must confess I am at a complete loss to understand whether the severe strictures and inferences contained in your letter are intended to apply to the second largest architectural body to the R.I.B.A., namely, the Institute of Registered Architects of which I have the honour to be President.

Since your letter has appeared in the technical press I am asking for a similar courtesy for the sake of clarification and I should feel obliged by an early reply from you since this matter cannot possibly remain as at present.

Yours very truly,
(signed) EDWARD PROCTER,
President, Institute of Registered
Architects.

Building Industry Restrictive Practices

The M.o.H.&L.G. has sent out a circular letter (No. 32/55) to all Housing Authorities and County Councils in England reproducing a copy of the letter being sent by the Ministry of Works to all contractors on the Government lists and the form of reply to be made by the contractors so that the authorities may consider "in the light of their own arrangements

for dealing with building contracts," what action they can usefully take, in the same spirit as that taken by Government Departments, to implement the recommendations of the Monopolies Commission.

Competition for Exhibition Stand

Ascot Gas Water Heaters, Limited, are offering 1st, 2nd and 3rd prizes of 200, 100, and 50 guineas respectively for the design of a stand to be erected at the Building Exhibition at Olympia, 1955.

The competition is open to all architects and to students who have reached Inter R.I.B.A. standard. The judges are: Messrs. C. S. Mardall, F.R.I.B.A. (Yorke, Rosenberg & Mardall); and F. Yerbury, O.B.E., Hon. A.R.I.B.A., Director of the Building Centre.

The closing date for entries is July 8. Conditions and entry forms from the Promoters, Ascot Gas Water Heaters, Limited, 255, North Circular Road, N.W.10.

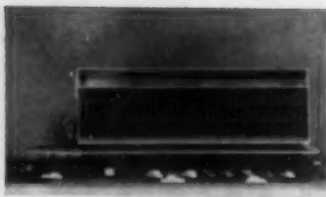
County of London Plan L.C.C. Staff

The L.C.C. Establishment Committee Report contains the following statement on the architect's staff:—

"As a result of a review of the staffing and organization of the planning division of the architect's department consequent on the recent approval by the Ministry of Housing and Local Government of the Administrative County of London Development Plan, a reorganization of the planning division is, we think, desirable. There are many difficult tasks to be handled by the division in connection with the implementation of the Plan and with the further consideration of the points and

modifications made by the Minister when giving his approval. Moreover, applications for development are still increasing in number and complexity. Further reports are to be submitted regarding the detailed staffing organization but in the meantime we are satisfied that the senior staff positions and their responsibilities should now be adjusted to meet requirements. At present the senior planning officer in charge of the division is assisted by four assistant senior planning officers, one in charge of each of four groups, viz., development control, reconstruction areas, development plan, and information and research. A regrouping is proposed by forming a policy and general group (in which be concentrated all planning policy on a county basis), under an officer to be designated senior group officer, who would also act as deputy to the senior planning officer. For this new grade an appropriate scale of annual salary will be £1,575—£75—£1,875. For matters relating to particular projects and areas and all aspects of planning in those areas it is proposed to establish three geographical groups, viz., north-western, north-eastern and southern planning groups, each under an officer to be designated group planning officer with a scale of annual salary £1,350—£50—£1,550—£75—£1,700. The proposed positions will be in substitution for the four existing positions of assistant senior planning officer.

The scale of salary proposed for group planning officers would also be appropriate for one position of assistant senior architect employed in charge of theatre work in the architect's department, to be redesignated assistant senior architect (theatres), and for the grades of assistant senior valuer in the valuation department and senior technical officer in the parks department. For these grades the existing inclusive scale is £1,275—£63 15s.—£1,530."



Model of N. Elevation

NATIONAL BANK OF IRAQ

A limited European architectural competition for the design of a new building for the National Bank of Iraq on an island site in Baghdad has been won by Professor William Dunkel, of Zurich, of whose design the assessors, Otto Bartning, Cecil Howitt and Sune Lindstrom said, "It will be a brilliant building with an expression of strength, security and dignity." The competitors were: Gordon Tait, F.R.I.B.A. (Sir John Burnet, Tait and Partners), England; D. Roosenburg, Holland; Pierre Vago, France; Giovanni Ponti, Italy; Celsing and Tesch, Sweden; Alvar Aalto, Finland; Palle Suenson, Denmark; Henry Lacoste, Belgium; William Dunkel, Switzerland; Werner March, Germany; and Sep Ruf, Germany, each of whom received £500 for his design. The winner will be appointed architect for the work.

The assessors were able to congratulate the promoters of the competition on their idea of holding a European competition which they said was fully justified by the result.

CHANGE OF ADDRESS

Messrs. Covell & Matthews, F./A.R.I.B.A., A.M.T.P.I., announce that they have moved their office from 48, Seymour Street, W.1, to 34, Sackville Street, Piccadilly, W.1. Telephone Reg. 2291/3.

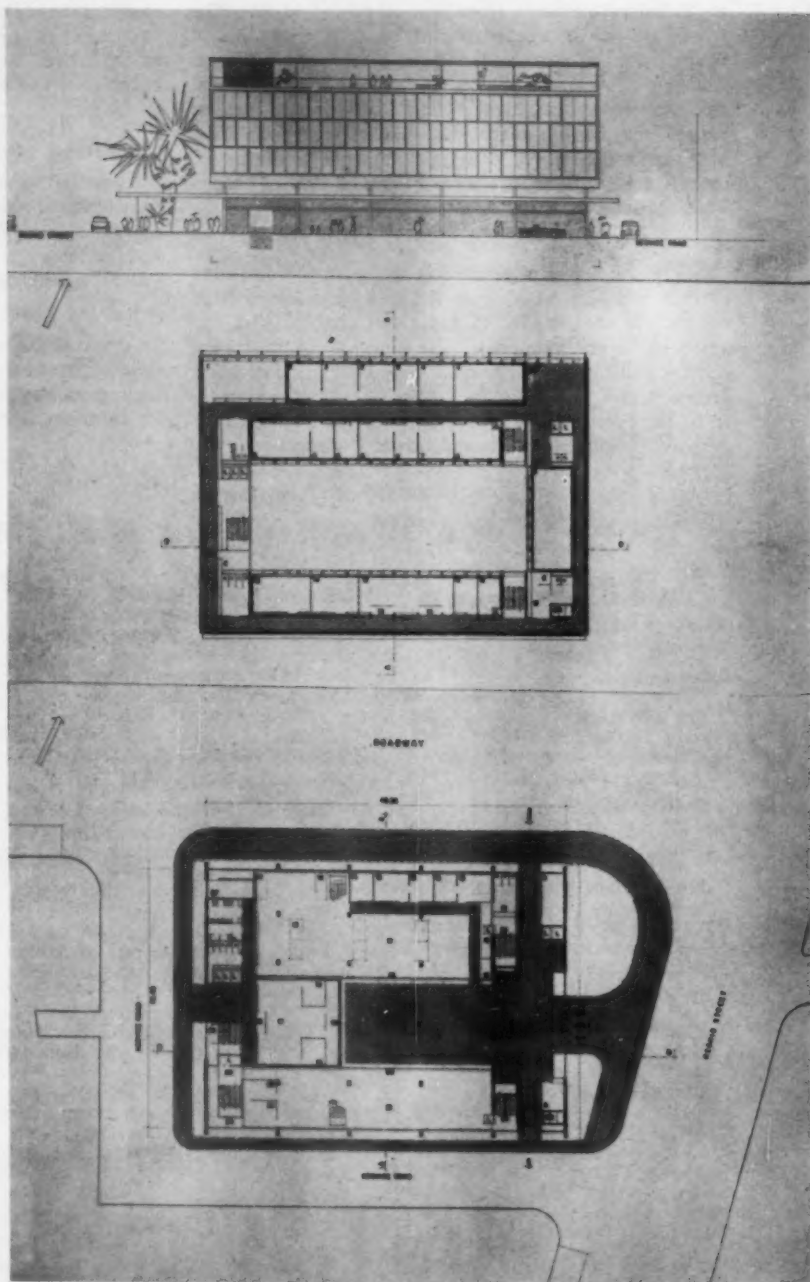
ROYAL ACADEMY: ADDENDA

Under the reproduction of the drawing in the Royal Academy of Offices and Flats for St. John's College, Oxford, the name of the architect was given as Lionel Brett only. The architects are Lionel Brett and Peter Bosanquet.

The caption to the illustration of the model of Harrow College of Further Education omitted to say that the scheme and model were by G. F. Holden and A. Hewanicki, A./A.R.I.B.A., County Architect's Department, Middlesex County Council.

CORRECTION

In the illustrated article on the Nunnery Primary School, Worcester, which appeared in our issue of March 3, 1955, Stellith wood wool slabs, manufactured by Stella Building Products, Ltd., were used and not Thermacoust slabs.

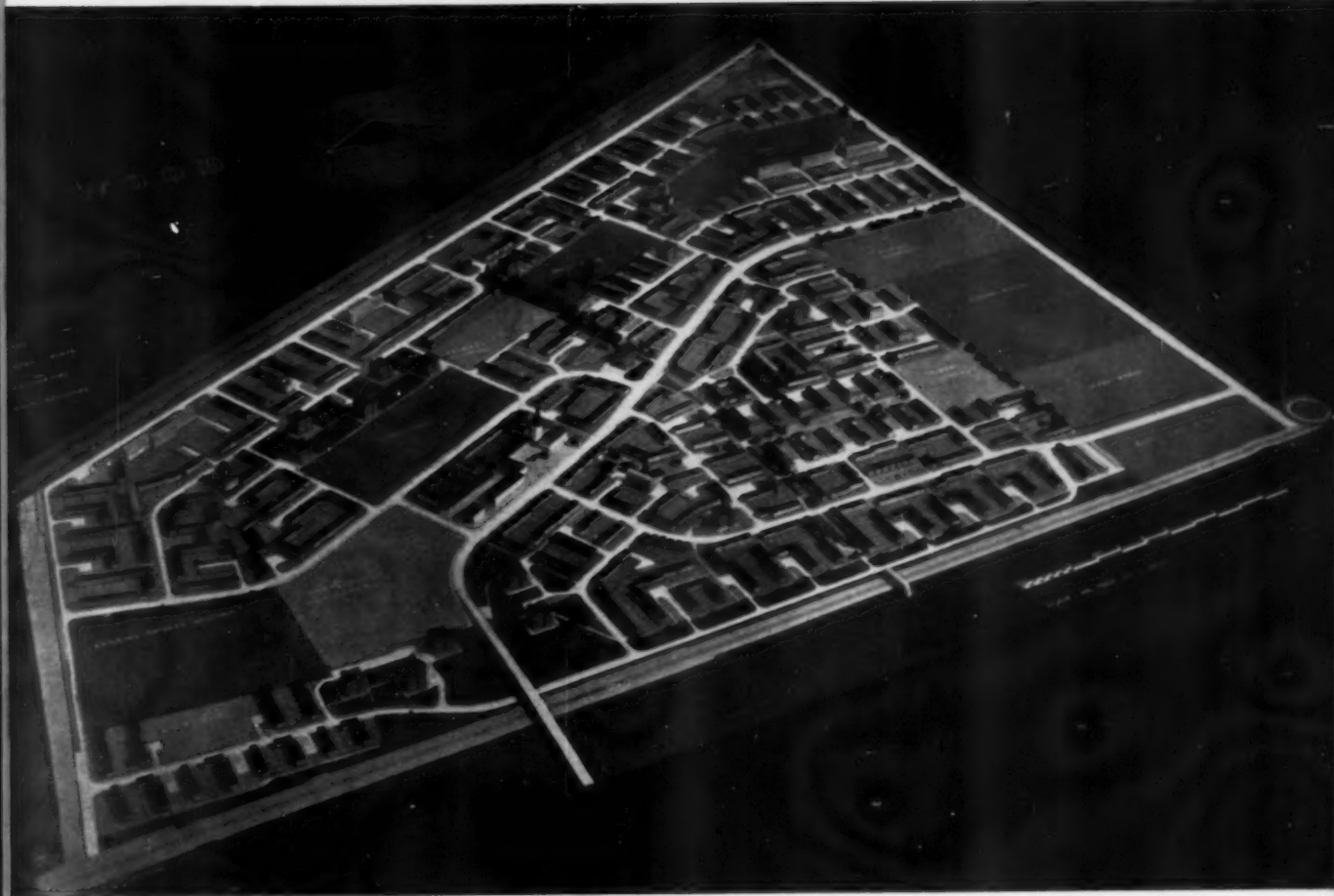


WINNING DESIGN BY PROFESSOR W. DUNKEL

GROUND FLOOR: UPPER THIRD FLOOR: N. ELEVATION

KEY: GROUND FLOOR: In direct connection with Upper Ground Floor. ENTRANCE PART: 1. Entrance by 3 rotating doors. 2. Entrance for private cars with parking space for 2 cars. 3. Car-drivers room. 4. Entrance hall and private unloading space. 5. Small room for Porters Enquiry. 6. Small room for Armed Guard. 7. Public telephone boxes. 8. Two lifts to Governor's Floor. 9. Mail Hall with counters. EXCHANGE CONTROL: 10. Five Counters. 11. Thirty General staff desks. 12. Eight glazed cubicles. 13. Director, Assistant Director and two special Secretaries. 14. Disponible. 15. Two small waiting rooms. ISSUES: 16. Two Counters. 17. Ten general staff desks. 18. One glazed cubicle. 19. Director and Assistant Director. BANKING: 20. Seven Counters (and two future extensions). 21. Twenty-six General staff desks. 22. Typist room for 3 persons. 23. Filing room. 24. Disponible. 25. Staff Entrance by 2 rotating doors. 26. Control Office. 27. Car lift to Bullion Yard. 28. Staircase and lifts to Basement and Upper Floors (1 used as Service lift to kitchen). 29. Entrance interior lift and staircase to Security Space and Strong Rooms. 30. Interior lifts and staircase to Basement and Upper Floor. W. Wardrobe. L. Lifts. CH. Chimney and ventilation vent.

UPPER THIRD FLOOR: 2-10. Governor-General's Suite and Higher Control. 11-15. Controller of Banks.



L.C.C. Abbey Wood Site Development

In December, 1951, the L.C.C. decided to acquire the Abbey Wood site, Woolwich, for housing purposes. The part of the site north of the railway line between Abbey Wood and Plumstead is about 238½ acres in extent and is bounded on the north by the southern outfall sewer embankment, on the east by Harrow Manor Way and on the west by existing playing fields. The provision of the pumping plant and other special drainage works necessary to make this area suitable for development is in progress. The development of that part of the Abbey Wood site which lies to the south of the railway line, comprising a small area of 15 acres, is proceeding.

The Kent River Board has raised and widened the river wall protecting the main site from flooding by the Thames and the site can now be developed for housing purposes without the provision of secondary flood defences. The Housing Committee has approved a scheme for the development of the main site by the erection

of 1,567 houses, 740 flats, 206 maisonettes and 53 dwellings for old people, making a total of 2,566 dwellings, together with 126 garages and 200 tenants' stores. Most of the houses will be built in terraces but variety will be given to this flat site by three-storey flats, four-storey maisonettes and some five-storey point blocks; the point blocks will, so far as possible, be sited on the boundaries of the open spaces. A wedge of open space runs through the estate from east to west. The site will be approached from the south by a new road crossing the railway and leading to the main centre, which will include 18 shops and an estate office, and sites for a health centre and a community centre, a church and a public house. Elsewhere on the estate six shops will be constructed and land will be reserved for school sites and a home for the aged and for re-siting existing industrial premises. It is also proposed to provide a group of houses for use as family homes for children in the Council's care. The density of development will be 52 persons (14.3 dwellings) to the acre. The cost of the scheme is likely to amount to about £6 million.

Model of the Abbey Wood site scheme

Identical Tenders

The L.C.C. has informed the Government that it received ten identical tenders for supply and delivery of steelwork for the new north block of the County Hall, with the recommendation that the matter be brought to the notice of the Monopolies Commission. The firms tendering were: Aston Construction Co., Ltd., Shore-ditch; Dawnays, Ltd., Battersea; Dorman Long (Bridge & Engineering), Ltd., Westminster; Moreland Hayne & Co., Ltd., Finsbury; Francis Morton & Co., Ltd., Liverpool; South Durham Steel and Iron Co., Ltd., Stockton-on-Tees; United Steel Structural Co., Ltd., Scunthorpe; Edward Wood & Co., Ltd., Manchester; H. Young & Co., Ltd., Leyton; Redpath Brown & Co., Ltd., Westminster. The tenders each amounted to £50,238 19s 3d.

The tender from the South Durham Steel & Iron Co., Ltd., which the Establishment Committee of the L.C.C. says is the only one of the ten firms which actually manufactures certain important parts of the steelwork, was accepted. The Chief Engineer of the L.C.C.'s estimate was £56,779.

A.B.S.—A.G.M.

The Annual General Meeting of the Architects' Benevolent Society was held at the R.I.B.A. on May 4. Mr. C. H. Aslin, C.B.E., P.R.I.B.A., was re-elected President. Mr. H. S. Goodhart-Rendel, C.B.E., P.P.R.I.B.A., was re-elected Hon. Treasurer. Mr. Howard Lobb, C.B.E., F.R.I.B.A., was re-elected Hon. Secretary. The Vice-Presidents and Council were elected for the year 1955-56. Mr. R. O. Foster was elected Hon. Auditor in place of the late Sir Harry Vanderpant. The President paid tribute to Sir Harry's keen interest in and generous support of the Society.

Mr. Aslin, in moving the adoption of the Annual Report, said:—

"The general position of the Society appears to be stationary as regards income, though present-day conditions have made the needs greater, and there are many opportunities which the Society would like to take for improving the lot of those who apply for help.

"The Homes Scheme is one very important way of helping the old people, so that they may have comfort and security in their last years. For this fund we are very much indebted to the energetic Ball Committee for the sums raised annually by the A.B.S. Ball.

"We are very grateful indeed to our local representatives and to the Allied Societies and other architectural organizations for all they have done to further the aims of the Society, and we hope they will continue their efforts to bring in new subscribers. We need the support of all the profession, whether at the beginning of a career or already established, and whether in private practice or in public offices. A very small subscription from every architect or assistant, which sum could be increased in proportion to the progress of their career, would make all the difference to the amount of good that the Society could do. May I ask all our contributors to make the Society and its activities known to their friends and colleagues, and to try to persuade them to support this very necessary and useful work."

Mr. Howard Lobb, in presenting the Annual Report, said:—

"It will be noted from the Report and Accounts that subscriptions and donations were about the same as in the previous year, but more applicants were helped during the year, although the total amount distributed was, regrettably, less than before because of the drop in income. We received more in legacies in 1954, and this money has been invested, in strict accordance with the bye-laws. A further investment was made for the Leonard Solomon Memorial Fund.

"A new pension was founded from Sir Banister Fletcher's legacy, and it is hoped to found another in due course from the investment of accumulated interest. This second pension will also, in accordance with Sir Banister Fletcher's will, be available for Fellows

or Associates of the R.I.B.A. or their widows.

"Our expenses were less during 1954, chiefly due to economies in stationery and printing. One loss of income is the closing down of the Insurance Department. The A.B.S. Insurance Agency, Ltd., has now been formed, however, in which the Society is a shareholder, and it is hoped that in the very near future some revenue from this new limited company may be received by the A.B.S.

"The Centenary Fund, which was founded for the provision of the Society's own Homes, has again been considerably increased by the proceeds of the A.B.S. Ball. We are very grateful indeed to the Chairman and Committee of the Ball for all they did, which resulted in a total profit of over £2,000. The date for the next Ball has been provisionally fixed for December 8, and from the interest aroused in the last one I feel confident we shall have an equal success.

"We have again been offered a free stand at the Building Exhibition, through the kindness of the Managing Director, Mrs. Montgomery. We are most grateful for this, and hope it will bring in funds by the sale of Christmas cards, and also make the Society's work known.

"The Allied Societies' representatives have been very helpful during the year, and many have taken a lot of trouble in visiting applicants, and so helping the Case Committee to arrive at the proper decisions. They have also stirred up interest among their colleagues, and some have organized functions in aid of the A.B.S. which have brought in welcome extra funds. We are very grateful to them all, and hope that they will not weary of well doing, because we badly need more money. Out of 18,000 architects on the register there are only about 2,000 who contribute towards the A.B.S. If only everyone gave us five shillings we should be home and dry, and able to help applicants who come before us very much more than we do."

A small committee was formed to consider what action should be taken for increasing the number of subscribers to the Society.

A.A. Scholarships in Architecture, 1955

The Council of the Architectural Association announces the award of the following scholarships tenable at the Architectural Association School of Architecture.

Leverhulme Scholarship (Value £2,000 over 5 years): A. W. Anderson (City of Norwich Grammar School).

Allied Ironfounders Scholarship. Presented by the Allied Ironfounders, Ltd. (Value £75 per annum): M. S. Higgs (University College School, London).

Metal Window Scholarship. Presented by the British Metal Window Manufacturers' Association, Ltd. (Value £75 per annum): K. F. Rout-

ledge (Carlisle Grammar School, Carlisle School of Art).

The Graham Laidler Memorial Scholarship. Presented by his Fellow Students (Value £75 per annum): C. A. Pearce (University College School, London).

1933-38 Students' Scholarship (Value £75 per annum): G. M. Hallett (Cheltenham College, Cheltenham School of Art).

"The Architect and Building News" Scholarship (Value £75 per annum): J. R. Gosling (Bancroft's School, Essex).

Patent Glazing Scholarship. Presented by the Patent Glazing Conference (Value £50): R. A. Matthew (of East Lothian, Scotland), (Michael Hall, Sussex).

The Natural Asphalte Council Scholarship. Presented by the Natural Asphalte Mineowners and Manufacturers Council (Value £50): P. A. Koh (King Edward Royal Grammar School).

Metal Window Senior Scholarship. Presented by The British Metal Window Manufacturers' Association, Ltd. (Value £50): A. G. A. Willcox (South-eastern College of Art, Portsmouth).

APPOINTMENTS

Major K. Martin Baxter, T.D., Dip.T.P.(Manc.), A.R.I.B.A., A.M.T.P.I., A.R.I.A.S., aged 37, formerly Deputy Chief Architect and Planning Officer, Peterlee Development Corporation, for the last three years, has been appointed to the newly created post of Borough Architect of Bolton at a salary of £1,937 10s 0d x 100 to £2,192 10s 0d, and will take up his duties on August 2, 1955.

His address from August 2, 1955, for all purposes will be: Borough Architect, Town Hall, Bolton. Tel. No. Bolton 4200.

Kent County Council have appointed two Assistant County Architects: Mr. Bernard C. Adams, A.R.I.B.A., formerly with the Derbyshire County Architect, will work on Education projects under the Kent County Architect; Mr. Eric P. Hains, A.R.I.B.A., formerly with the Lancashire County Architect, will be engaged on General County Buildings under the County Architect.

COMING EVENTS

The Guild of Surveyors

May 20 at 7 p.m. Discussion and lecture by G. D. Butler, on "The Use of Emulsions, Water Paints and Alkyls," at the Building Centre, 26, Store Street, W.C.1.

The Modular Society Ltd.

May 24 at 7.30 p.m. Paper on "Modular Co-ordination in Germany: Rationalized Brick and Block Construction," by D. Foster, A.R.I.B.A., of the Building Research Station. At the Building Centre.

The Architectural Association

May 25 at 8 p.m. Ordinary General Meeting. "Architectural Memories 1904-1954," by H. S. Goodhart-Rendel, at 34, Bedford Square, W.C.1. Dinner at 7 p.m. Seats must be reserved.



South-east aspect

Control Building, London Airport

architect: FREDERICK GIBBERD, C.B.E.

THE Control Building stands to the south of the centre of the inner terminal area facing the southern entrance to the main tunnel; it controls all movements of aircraft approaching and departing from the airport and all movements of aircraft and motor vehicles on the airport movement area.

As the busiest civil airport in Europe, London Airport requires an air traffic control unit capable of handling 50 or more aircraft movements an hour at peak hours, and this is carried out by a highly complex system of radio and line communication, radio and radar navigational aids, and airfield lighting. The building also contains the headquarters of the airport management under the Airport Commandant; aeronautical telecommunications, medical and Police centre, restaurant and canteen facilities for all staff employed in the Central area.

The building is arranged in a "T" shaped plan with a Control Tower 127 feet high as its fulcrum. Restaurants are grouped with the kitchen in the leg of the "T" to the south side. The west wing is planned to house the medical centre with administration offices on the first floor. The main telecommunications services are accommodated in the East wing which includes a telephone exchange and frame room. Management offices occupy the lower part of the Control Tower and part of the wings.

The Control Tower

The Air Traffic Control services occupy the top four floors of the Control Tower and the glazed pent house on the roof. The height of 127 feet was needed to give a view over the top of the buildings of the runways and outer taxiway.

The tower in plan consists of two intersecting trapeziums with staircases between them and a centre service core, and this shape was determined by a number of practical considerations. The more important of these were the need to provide the view required by air traffic control, the shape of the Approach Control Room and the layout of technical equipment with an interconnecting vertical duct. Furthermore, the arrangement of the tower walls on varying planes at angles to each other is intended to minimize the interference which large flat surfaces are likely to cause to radio approach and landing aids. The wider trapezium faces east and contains the Approach Control room with windows on three sides; the narrower trapezium faces west and contains smaller rooms serving the Control organization.

Services Core

A central services core extends to the full height of the tower and contains a passenger lift, goods lift for equipment and standby for passenger lift; cable duct for all telecommunications and airfield lighting wiring, pneumatic tubes,



Approach control windows

Control Building, London Airport

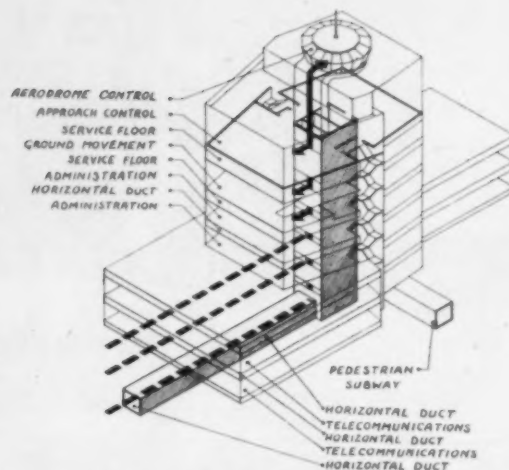
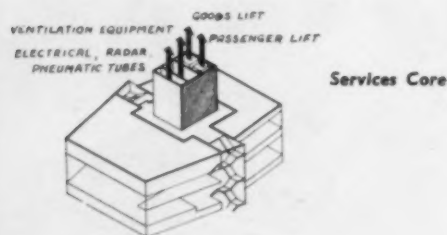
etc., and ventilation duct for air conditioning control rooms. The core is identified on each floor by a wall treatment of vertical polished mahogany strips. Underneath all control rooms there are false floors in which cables and tubes can be run from the vertical duct to any position in the room, thus ensuring flexibility in the control desk layout and ease of maintenance of technical equipment.

Aerodrome Control Room

The pent house on the roof is the Aerodrome Control room and from it is obtained a panoramic view of the whole airport and the sky above. The room has double glazing on all sides and part of the roof, and is air conditioned for both summer and winter conditions. The movement of aircraft and vehicles on the airport except on the runways in use are controlled from this room, together with the airfield lighting system. The pent house is crowned with a Radar scanner which covers the aerodrome area at night and during reduced visibility. Housed in this room is a "mimic" display which reproduces the airfield lighting as it is brought into use. An acoustic ceiling (Sanacoustic) has been used, finished a dark blue to reduce light reflections, and the floor consists of removable hardwood panels covered with cork through which holes can easily be bored for additional cable runs.

Approach Control

The Approach Control room on the sixth floor was planned to cope with an expansion of traffic or with improved techniques of air traffic control. During the next



Vertical and Horizontal Duct System

few years the southern half of the room will be used for Approach Control and the northern half for control development.

The height of the room is 15ft in order to accommodate a control information panel against the back wall. The control room is cantilevered out beyond the face of the tower and is enclosed on three sides with double glazing sloping outwards to avoid reflection.

A mezzanine gallery runs round the window line and is in direct connection with the seventh floor. The gallery is arranged so that one half is enclosed by windows to form a balcony inside the room overlooking the control room and the other half an external balcony overlooking the airport. The gallery will be used by visitors and staff under instruction.

The room is air conditioned, is heated by a Frenger ceiling and has a cork floor.

The colour scheme was controlled by radar equipment and is mainly shades of blue (colours containing yellow were likely to reflect on the Radar screens). Venetian blinds have been provided so that the natural light can, if necessary, be adjusted for radar viewing conditions.

Ground Movement Control Room

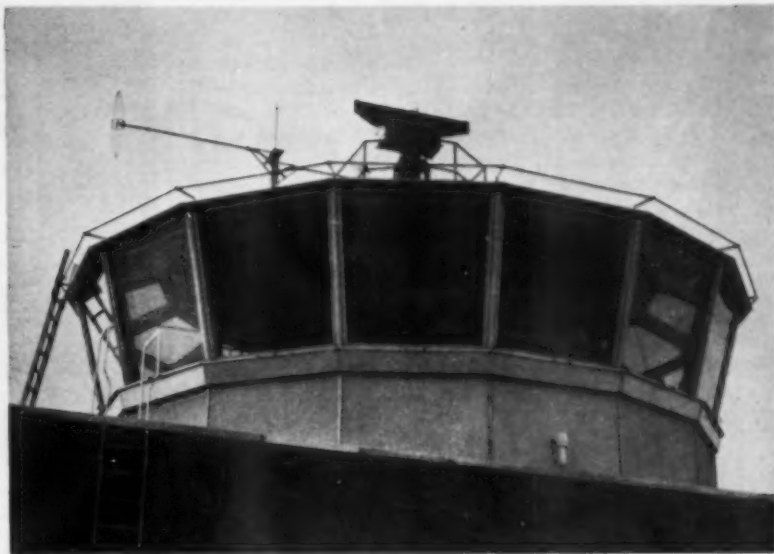
This room on the fourth floor of the tower is designed to take over the control of aircraft and motor vehicle movements which in the early stages is being done in the aerodrome control room.

At present it is being used as the telemove centre. The

[Continued on page 592]



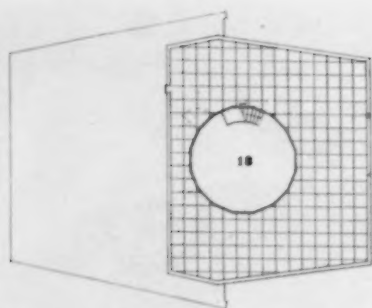
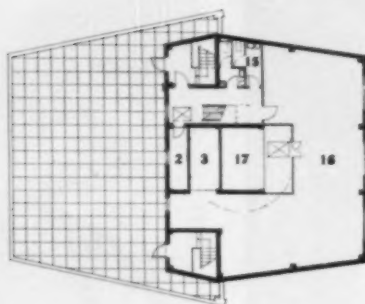
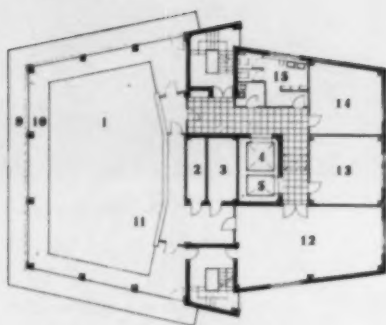
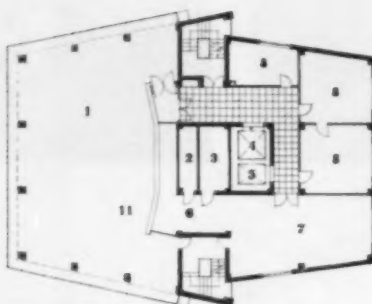
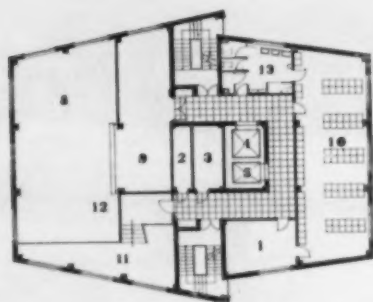
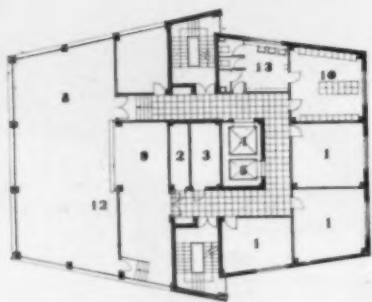
Approach control windows



Aerodrome control

Inside aerodrome control room



2nd FLOOR3rd FLOOR7th FLOOR6th FLOOR5th FLOOR4th FLOOR**Key**

- 1 APPROACH CONTROL ROOM
- 2 CABLE BOLT
- 3 VENTILATION BOLT
- 4 RADIO LIFT
- 5 PASSENGER LIFT
- 6 RADIO DISPLAY
- 7 WIRELESS TELEGRAPHY
- 8 OFFICE
- 9 EXTERNAL BALCONY
- 10 GALLERY
- 11 PHOTO DISPLAY
- 12 PHOTO EQUIPMENT
- 13 LIBRARY
- 14 HALL REST ROOM
- 15 LAVATORY
- 16 VENTILATION PLANT AND TANKS
- 17 LIFT MOTOR ROOM
- 18 APPROACH CONTROL ROOM

Key

- 1 ADMINISTRATION OFFICE
- 2 CABLE BOLT
- 3 VENTILATION BOLT
- 4 RADIO LIFT
- 5 PASSENGER LIFT
- 6 COMMUNICATIONS OFFICE
- 7 CONFERENCE ROOM
- 8 RADIO MOUNTING (INTERNAL ROOM)
- 9 EQUIPMENT
- 10 LOCKER
- 11 GALLERY
- 12 MUSIC ROOM
- 13 LAVATORY

Control Building, London Airport

Continued from page 590

ground movement control room is immediately below the approach control room and is of the same shape. The windows are of the double glazed "Carda" design. The walls are lined with acoustic Paxtles and the floor is of cork.

Telecommunications

The east wing contains all the aeronautical telecommunications staff, and equipment related to the control of aircraft. The various rooms include a telephone exchange with the necessary frame room and a large teleprinters room which have been specially treated with acoustic materials to reduce the sound level. The ceilings are perforated metal

trays with a slag wool blanket (Sanacoustic), cork floors and double windows (Carda).

Medical Centre

The medical centre is in the west wing and is the headquarters of the medical services of the airport and is fully equipped as a casualty clearing station, including two small wards. Aircrew licence examinations will also be carried out here.

Entrance Hall

The exterior of the main entrance has a platform of Derbyshire Fossil limestone with flower beds inset and is



1



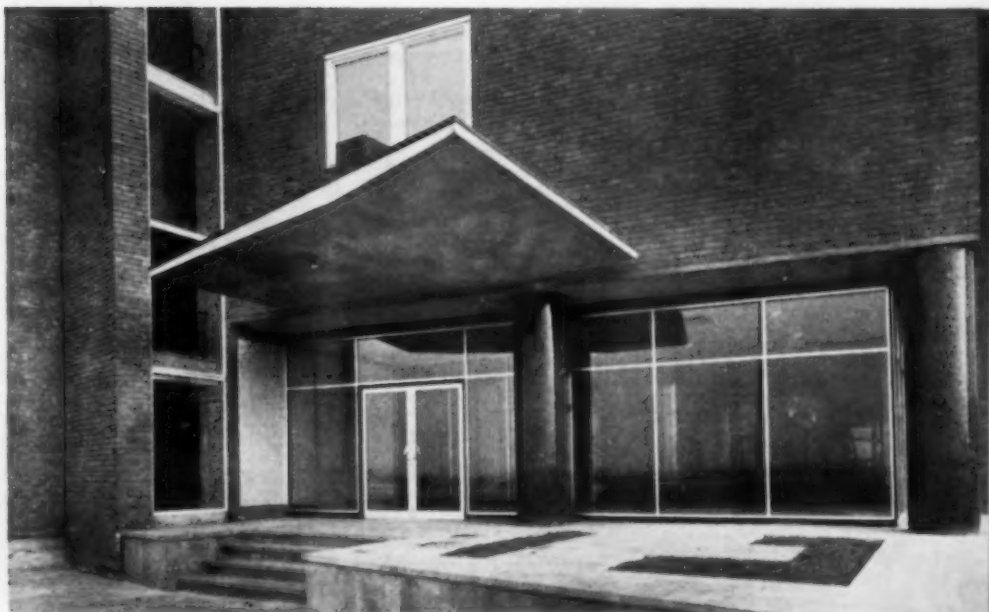
2

3

1. The Airport Commandant's office with bay window, seen in the exterior view on page 596

2. A telecommunication's room which has a sound-absorbent ceiling

3. The main entrance. Platform with inset flower beds is of Derbyshire Fossil limestone



carried through a glazed screen into the Entrance Hall. Over the entrance doors is a floating concrete canopy on a single beam support. The interior wall treatments consist of grey glazed tiling and vertical mahogany strips to the service core, with a surround to the enquiry counter of Levanto Rosso marble. The main columns are encased with green scagliola in a Genoa marble pattern. The entrance screen and doors are in anodized and polished aluminium.

Offices

All offices in the wings are formed on a 12ft bay grid and divided up with metal removable partitions. The floors are thermoplastic tiles and the ceilings removable concealed fixing fibreboard panels with recessed fluorescent light fittings with egg-crate louvres. The offices in the tower are similar but have Frenger heated and acoustic ceilings. All offices have double glazed "Carda" Swedish-type windows to reduce aircraft noise.

Teleprinter Room and Telephone Exchange

These two rooms required a very high level of sound absorption to reduce the internal noise level, and this has been obtained by a ceiling constructed of perforated removable metal trays with glass silk blanket infill combined with a cork floor.

Equipment Rooms

A number of the rooms in the east wing were specially designed to house the complicated equipment related to the radar and telecommunications system and airfield lighting. The cable work was installed in specially designed floor ducts with removable covers which in turn are connected with the underground subway system running between the terminal buildings and the cable ducting of the runways.

Staff Cafeteria and Industrial Canteen

The south wing is devoted to catering facilities and consists of two large cafeterias, with a further waitress



STAFF CAFETERIA

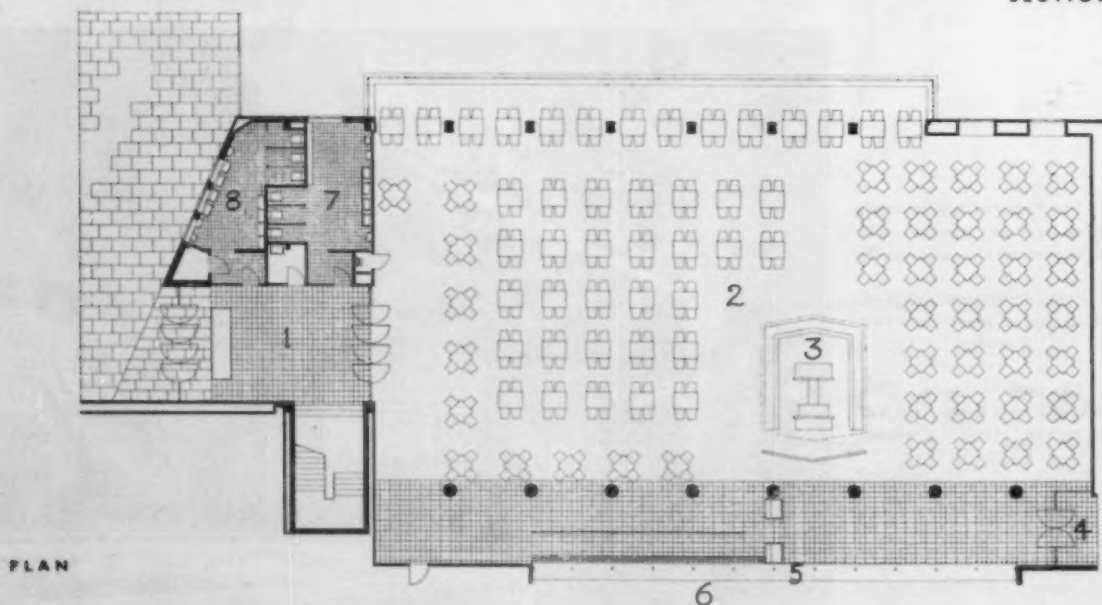
KEY

- | | |
|-----------------------------|-------------------|
| 1 Entrance hall | 5 Serving counter |
| 2 Cafeteria | 6 Kitchen |
| 3 Tea bar | 7 Female lavatory |
| 4 Entrance from tower foyer | 8 Male lavatory |

Staff cafeteria; kitchen on opposite page



SECTION



PLAN

Control Building, London Airport

(continued from page 593)

restaurant at first floor level to be brought into use when the staff increases. The floor of both cafeterias is of Muhuhu wood block over floor heating coils with heather brown quarry tiles in front of the servery areas.

Each cafeteria has a tea-bar which is fully equipped with electrically operated tea and coffee sets, etc. One wall of the staff cafeteria is papered with a special wallpaper designed for the Architect by Miss June Lyon specially for London Airport, and other walls are treated with contrasting colours, with a special terrazzo surround to the servery openings.

The Staff cafeteria ceiling is a series of fibrous plaster troughs with concealed fluorescent tube lighting.

The tables which are of the stacking type were designed by the architect and have Formica tops and tube metal legs. The chairs in the staff cafeteria were made by Kingfisher, Ltd. (designed by Robin Day), and in the industrial canteen Hille's Q-stak; all of which stack.

Kitchen

A full scale kitchen planned between the two main cafeterias is operated on high pressure hot water from the central heating station. The main kitchen area has a clerestory natural light and the stores bakery, etc., is lit with roof dome lights.

The kitchen has a delivery yard with compartments for swill and empties, and the plan is based on a route system of food through the stores and preparation rooms to the cooking area, and then on to serveries. Refrigeration rooms are situated off the meat and fish preparation rooms and the larder. The main part of the kitchen is equipped with up-to-date units, including five boiling pans, roasting and steaming ovens, etc.

The serveries have a series of counter height hot cupboards. Three service food lists will serve the first floor future waitress restaurant.

The floor is heather brown quarry tiles and the ceilings are treated with asbestos spray, and all walls are tiled to 6ft high.

General Construction

The building has been constructed with a steel frame encased in concrete with external walls of brickwork and artificial stone facing panels. The brickwork is in a Lough-

borough hand-made rustic facing brick with recessed pointing. All steelwork had to be electrically bonded together and earthed against interference to radar. The framework was designed on a 12ft grid because it is a convenient unit for offices and enables partition units to be standardized. The floor and roof construction is of precast reinforced concrete units. The roofs are insulated with a lightweight screed and waterproofed with asphalt finished with marble chippings. The roof of the staff cafeteria is designed so that it can be converted into a roof garden for the staff. All wings are disconnected from the tower by expansion joints.

Heating and Ventilation

The heating and hot water is provided from an oil-fired central heating station in the West Apex of the central area and is piped to the building by a subway. All the control rooms are air-conditioned with cooling in the summer. The whole of the rooms in the tower have Frenger heated and acoustic removable ceilings. The Cafeterias have floor coil heating and normal artificial ventilation. The wings are heated by radiators and special rooms, such as teleprinter rooms, telephone exchange, etc., have artificial ventilation.

Time Schedule for Scheme

The design work was commenced at the end of 1950. A contract for foundation and steelwork was started in October, 1951, and the main building contract was commenced in December, 1952. The work will be finished in August, 1955.

architect's partner in charge: R. J. DOUBLE
assistant architect: R. HYNÉ

responsibility for construction:
DIRECTOR-GENERAL OF WORKS, AIR MINISTRY
Consulting engineers:

structural: SIR WILLIAM HALCROW AND PARTNERS
heating and ventilation:

G. H. BUCKLE AND PARTNERS
electrical: EWBANKS AND PARTNERS

quantity surveyors: RYDER HUNT AND PARTNERS
general contractors:

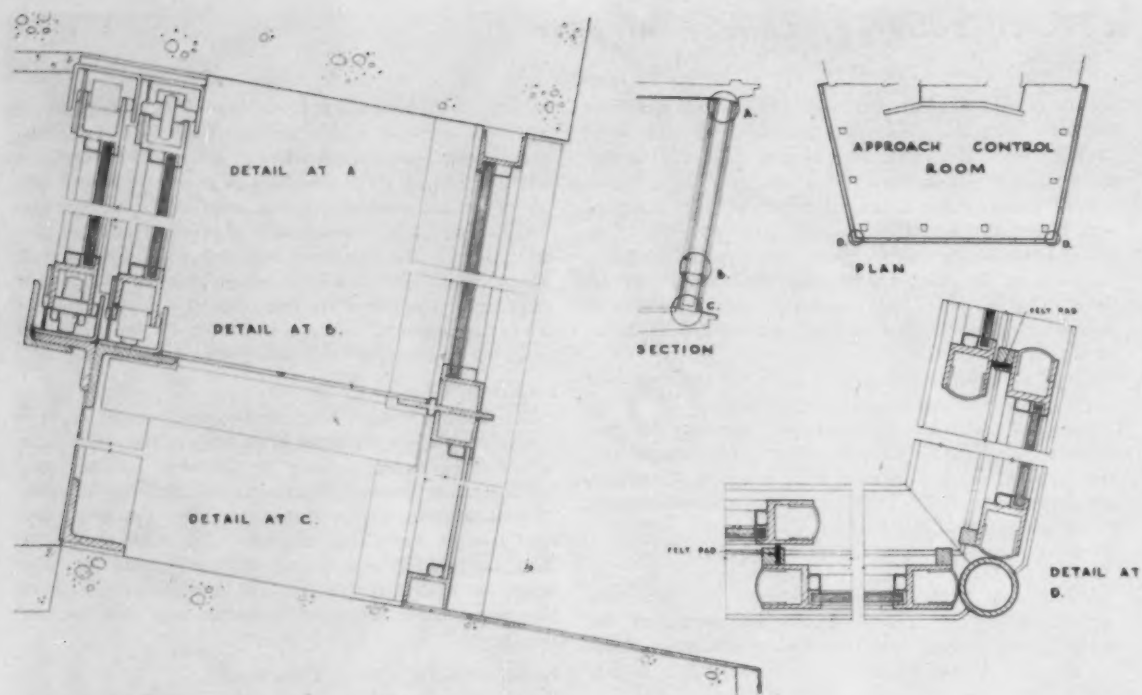
steelwork: REDPATH BROWN & CO. LTD.
foundations and building work:
TAYLOR WOODROW CONSTRUCTION LTD.

subcontractors:

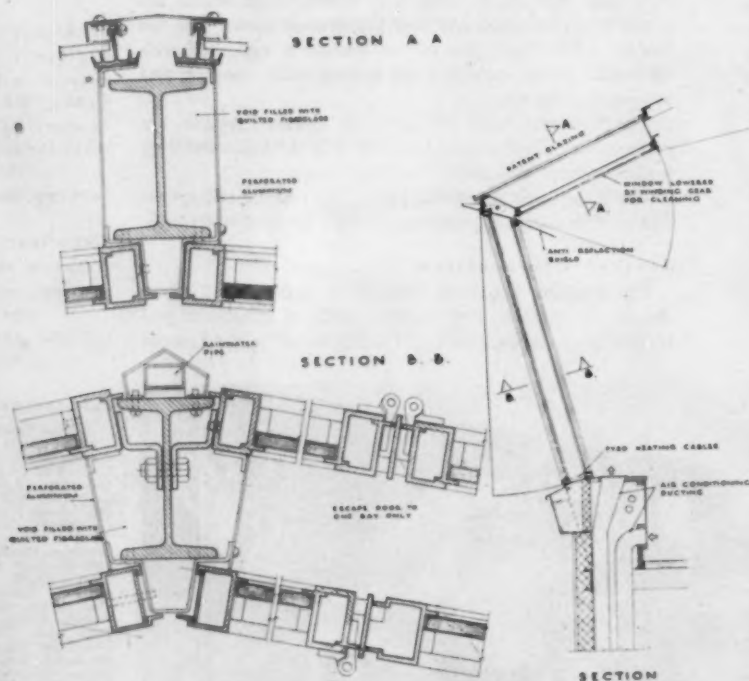
Acoustic Flooring: Rowan & Boden, Ltd. Aluminium Entrance Doors and Screens: H. H. Martyn & Co., Ltd. Aluminium Roofing to Aerodrome Control Room: Fredk. Braby & Co., Ltd. Anti-Sun Glass: Pilkington Bros., Ltd. Artificial Stone: Cooper Wettern & Co., Ltd. Asbestos Spray: Newalls Insulation Co., Ltd. Asphalt: The Natural Rock Asphalt, Ltd. Bricks: J. H. Sankey & Son, Ltd. Bronze Metal Skirtings: H. H. Martyn & Co., Ltd. Cable Racking: Johnson & Phillips. Cork Flooring: Horsley, Smith & Co. (Hayes), Ltd. Decorations: Decorative Specialists, Ltd. Dome Lights: T. & W. Ide, Ltd. Electrical Installation: Electrical Installations, Ltd. Electrical Ventilation Louvers: Greenwood & Airvac Ventilating Co., Ltd. Felt Roofing: Permanite, Ltd. Firedoors and Screens: Durasteel, Ltd. Fibre Board False Ceilings: John Dale, Ltd. Fibrous Plaster Ceilings: David Edalle & Co., Ltd. Heating and Ventilation: The Norris Warming Co., Ltd. Ironmongery: James Gibbons, Ltd. Joinery: Eustace & Partners. Kitchen Equipment: The Falkirk Iron Co., Ltd. Lifts: The Express Lift Co., Ltd. Limestone Paving and Marble: The Nine Elms Stone Masonry Works. Mounting for Lift Motors: Metalastik, Ltd. Paints: Hadfields (Merton), Ltd. Plumbing: Dent & Hellyer Sanitation, Ltd. Pneumatic Tubes: The Lamson Engineering Co., Ltd. Precast Floor Units: The Trussed Concrete Steel Co., Ltd. Roller Shutters—Steel and Wood: Bellman, Ivey, Carter & Co., Ltd.; G. Brady & Co., Ltd. Removable Metal Partitions: The Ayrshire Dockyard Co., Ltd. Sanitary Fittings: B. Finch & Co., Ltd. Sliding Door: Potter Rex, Ltd. Soincases—Metal: Haywards, Ltd. Steel Balustrading: The Morris Singer Co., Ltd. Telephone Ducting (Underfloor): The Key Engineering Co., Ltd. Terrazzo Paving: The Arcanum Terrazzo & Stone Co., Ltd. Terrazzo W.C. Partitions: The Mosaic & Terrazzo Precast Co. (Staines), Ltd. Venetian Blinds: The Cristall Manufacturing Co., Ltd.; Wall Tiling: Parkinson (Wall Tiling), Ltd. Windows: Aygee, Ltd. (Metal); Holcon, Ltd. (Double Glazed Cards). Woodblock Flooring: Housley Smith & Co. (Hayes), Ltd.

Details overleaf





APPROACH CONTROL WINDOW DETAILS

SCALE: $\frac{1}{8}$ F.S.

AERODROME CONTROL WINDOW DETAILS

Control Building, London Airport

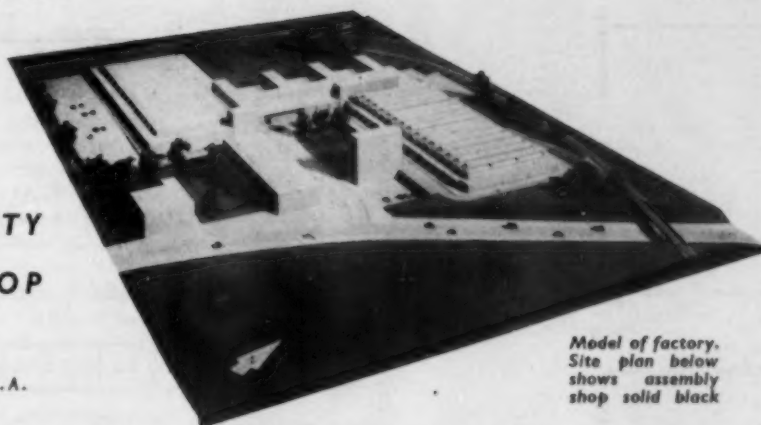
MURPHY RADIO FACTORY, WELWYN GARDEN CITY NEW ASSEMBLY SHOP

architect:

C. W. HUTTON, B.Arch., F.R.I.B.A.

Consultants:

H. G. COUSINS, B.Sc. M.I.C.E.: Reinforced Concrete. HANDCOCK & DYKES: Mechanical & Electrical



Model of factory.
Site plan below
shows assembly
shop solid black

THE clients required a factory for radio, television and electronic equipment over an area totalling 300,000 sq ft. The building comprises, production and assembly shops, laboratories, model shops, machine and plant shops, welfare and administration offices, and provision for future extension.

The factory which is being built by the Welwyn Garden City Development Corporation is to be handed over in stages to Murphy Radio, Ltd. The assembly shop is now completed, and the boiler house is still under construction. The assembly shop which forms the subject of this article is 470ft long by 180ft wide. It has staff entrances, cloakrooms and lavatories on the south side and offices at the west end; fire escapes and the loading facilities are on the north side. The total floor area is approximately 98,000 sq ft.

The power house which is approximately 6,000 sq ft in area will serve the whole factory. It will house four oil-fired high pressure hot water boilers, air compressors, high and low tension switch gear and transformers; and the cold water storage tanks for the assembly shop area.

Assembly Shop Construction

Reinforced concrete shell construction was considered to

have many desirable features which fitted in with the requirements, and after considering various forms a cantilevered construction was adopted. This consists of cantilevered shells running north and south with monitor lights. The cost was estimated at 11s per sq ft for foundations, columns and roof. It was found that this form of construction gave even lighting values at bench level, an effect of brightness without glare, and the light coming from all parts of the skylights reduced the risk of work being overshadowed. The cantilever shells span the 180ft width of the building in three 60ft bays. The extreme edges of the cantilevers are tied together by post-tensioned beams at 10ft centres and the shells are rigidly supported by reinforced concrete diaphragm walls at 60ft intervals over each column. To give stability the diaphragms are connected together across alternate monitors, the intermediate monitors being left free to provide for thermal movement by the flexing of the columns.

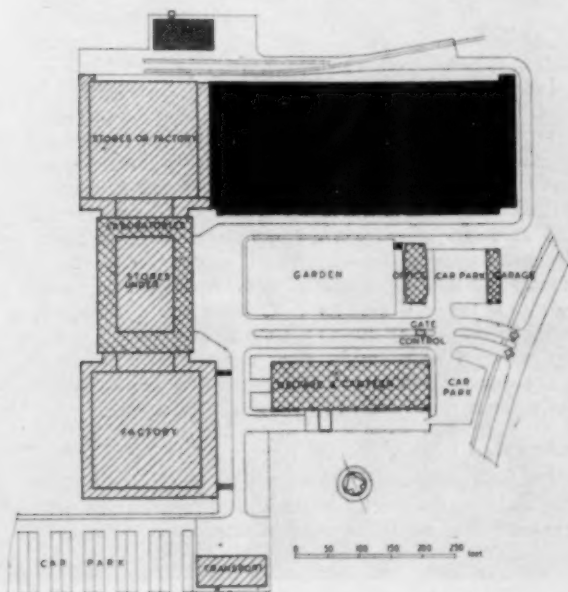
The openings between the edges of the cantilevers are covered by monitors with shell roofs supported on 5in diameter R.C. columns at 10ft centres. The edge of the shell is thickened to provide an abutment for the post-tensioned tie beams, an upstand for the glazing, a base for the columns supporting the monitors and a firm edge to the cantilever structure. The upper surface provides a cat-walk for the window cleaner.

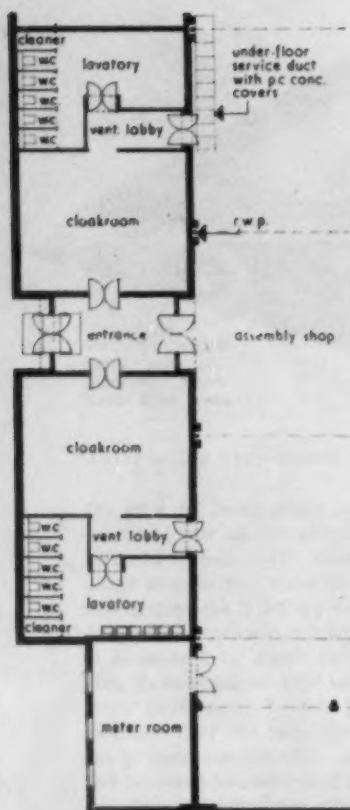
Circular holes are left in the diaphragms to give access between one section of the roof and the next and separate holes at gutter level are left for the free drainage of rainwater. The circular holes in the diaphragms at the extreme ends have no practical purpose but they make it obvious from ground level that the space over the shell is open to the sky. They may help to some extent in explaining the construction as the tie beams can be seen through them.

From a study of the sections it will be clear that all cantilevers are equally loaded except at the extreme ends where compensation for the weight of the last monitor is provided by slender reinforced concrete ties at 20ft centre to centre.

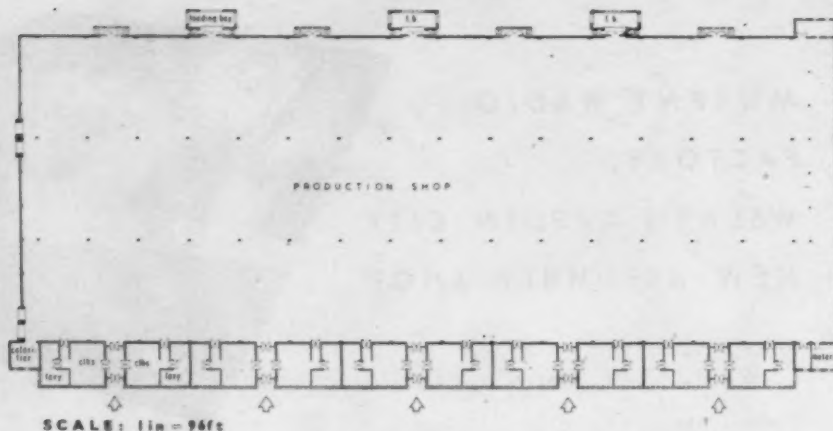
Cloakrooms, Lavatories and Works' Offices

The main workshop is enclosed with brick walls up to the underside of the valleys. On the east and south sides Works' offices, Works' entrances, cloakrooms and lavatories are built with brick walls, precast cills, mullions, lintels and guttering supporting a Stahlton hollow tile prestressed concrete roof.





SCALE: 1 in = 24 ft



SCALE: 1 in = 96 ft



Cloakroom roof

Murphy Radio Factory

Expansion Joints

The roof over the Assembly Shop is monolithic across the 180ft width of the factory. Thermal movements estimated to be + or - $\frac{1}{2}$ in at each end of this length were allowed for by leaving a generous space between the brickwork and the end columns. In the length of the factory two cantilever shells are connected together, expansion joints being necessary in every alternate bay at 60ft centres. All flat roofs are divided at intervals by expansion joints, the maximum distance between them being 60ft. These joints are carried through mullions and in some cases through brickwork, where it was thought that movement of the roof might cause damage to the structure. On roofs the joints consist of an upstand divided through the centre and covered with a capping fixed on one side only. In brickwork the joint is usually of tongue and groove form lined with bituminous felt or impregnated building board.

The initial shrinkage of concrete is rapid but after that it continues at a very much lower speed for periods up to about two years. The effect of shrinkage has been

noticed in some roofs which have tended to curl, forming cracks under the eaves. These cracks will be pointed up when the movement ceases and are not expected to open again. In precast members it is usual to find the joints opening, fine capillary tracks being formed which draw in rainwater. Brickwork under such joints can be badly stained. Shrinkage of this kind was thought to be inevitable and all joints where weather can penetrate have been designed to obviate damage. All cill joints have been provided with a lead tray turned up at the back and edges and built in as the units were fixed. Copings have a slip stone at the joints, grooved out on the top surface to drain away any moisture which might enter through an open joint in the coping. Evidence of shrinkage in the precast units has not been accompanied by staining of brickwork.

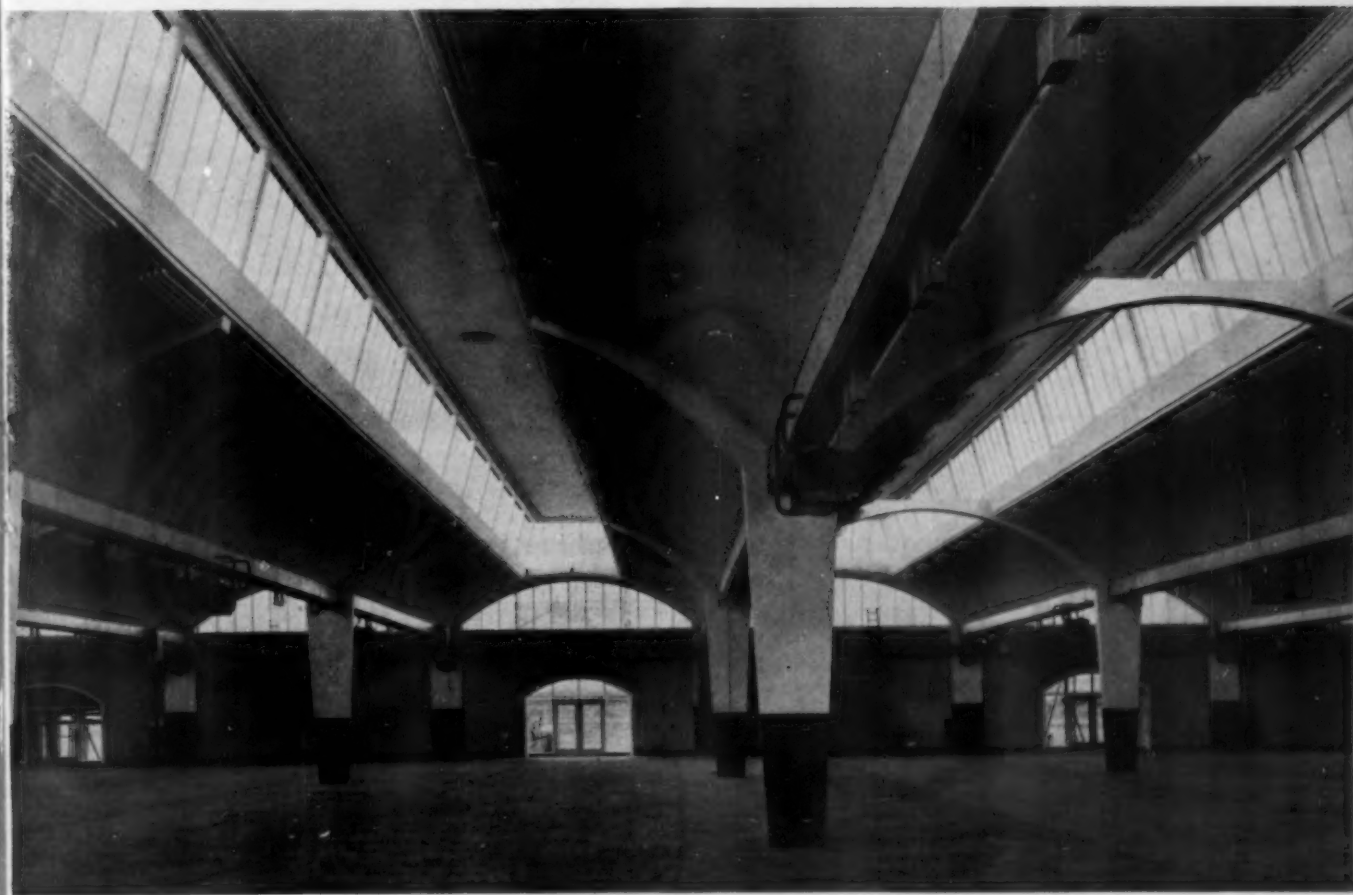
Insulation

The main roofs are insulated by a layer of 1 in cork laid over the shell, $\frac{1}{2}$ in thick cork being used on cat-walks and upstands. Hollow tile flat roofs are finished on the under-

side with Vermiculite plaster. Double glazing is used in monitors and clerestories. Most of the solar radiation is reflected by the white gritted felt used as a roof covering (two layers on curved roofs, three layers on flat roofs). The cork was placed above the roof surface in order to give the minimum difference between summer and winter temperatures in the concrete, thereby reducing thermal movements to the smallest dimensions.

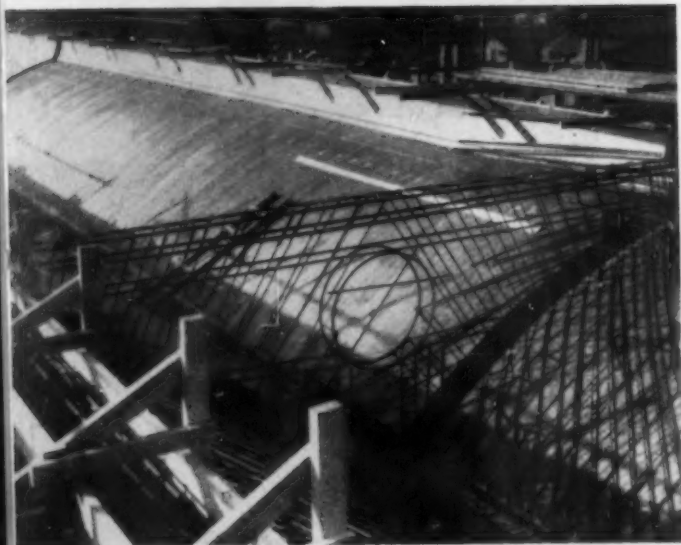
Production area—fixed glazing, mechanical ventilation by warmed and filtered air through unit heaters at north and south ends and exhaust fans in centre of monitor roofs. System can be used (a) for supplying warm fresh air to slightly pressurize the production area and reduce draughts in winter; (b) for supplying warm fresh air at an accelerated rate of flow by switching on exhaust fans; (c) for supplying cold fresh air and exhausting stale warm air in summer-time. The main body of the production area is ventilated by unit heaters of the circulating type (without fresh air intake). The fans provide for one air change per hour in winter-time which is believed to be ample for the number of operatives and the air volume of the building. All fans are controlled by thermostats in groups of three bays making it possible to vary temperature or ventilation in different parts of the factory.

Production shop





Post-tensioned tie-beams



Reinforced concrete diaphragm walls under construction

Murphy Radio Factory

Heating

Production area—high pressure hot water, mains running along south wall with connections to unit heaters suspended under valleys. Lavatories, cloakrooms and offices—low pressure hot water coils and radiators.

Services Distribution

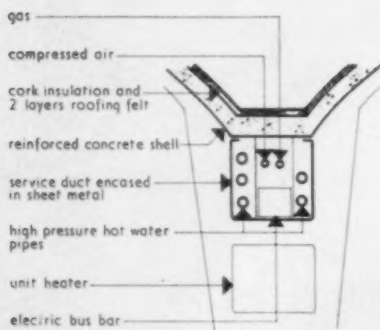
Cold water, low pressure hot water in trench on south side of production area. Gas and compressed air with high pressure hot water at high level on south side with branches and tap off points at intervals under valleys. Electrical distribution by bus bars along north wall with branches and tap off units under valleys. Bus bars enclosed in ducting; heating, gas, compressed air and electrical distribution to tap off points under valleys all enclosed in ducting.

Fire Mains

There is an external ring main and hydrants, internal hose reels and supplementary appliances, automatic and manual alarm systems communicating directly with the local fire station.

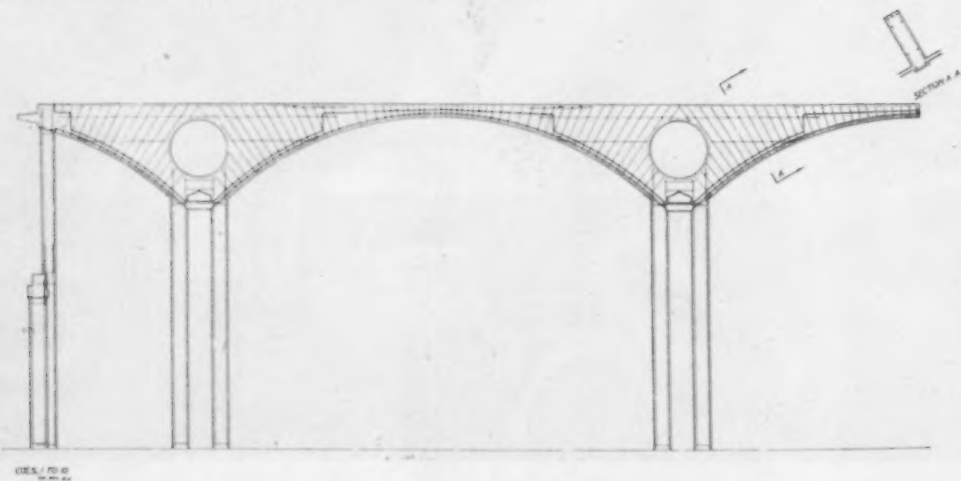
Day Lighting

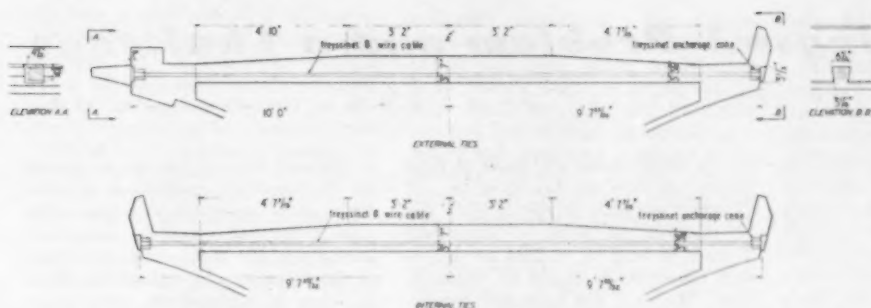
The daylight factors aimed at were high—about 8 per



Encased service duct

Section showing diaphragms and slender ties at end to compensate for lost monitor





Detail of
tie-beam
between
barrel vaults

cent of full daylight. Tests taken on completion confirm that this figure has been achieved. The lighting is remarkably even and in the winter months it has the expected brightness, some low level sunshine entering the building. Lavatories have high-level windows and Perspex dome roof lights.

Artificial Lighting

Cold cathode tubes are fixed under the extreme edges of the cantilever shells, the light from them thus following the same direction as daylight. To avoid the stripey effect of continuous lighting tube the standard 10ft length was bent in a "U" shape, two of these units being placed side by side in every 10ft length of the roof. Four tubes are then connected to transformers which are accessible for maintenance from the walkways on the roofs. The lamps were selected by Murphy Radio to suit the range of colours

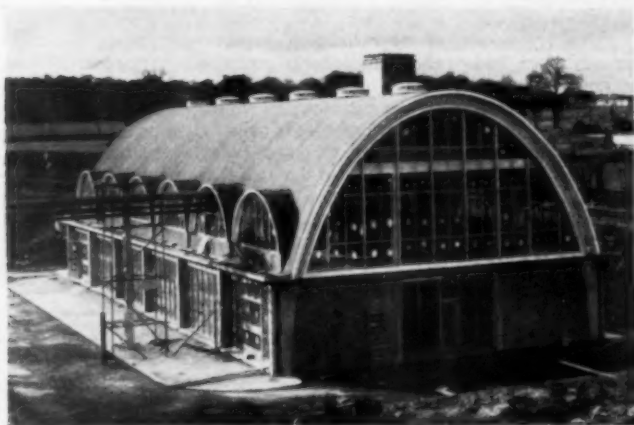
used in identifying electrical circuits. The lighting intensity required at bench level was 20 foot-candles. When the lamps are new a much higher figure is being obtained. Benches are equipped with individual lights for fine work.

Finishes

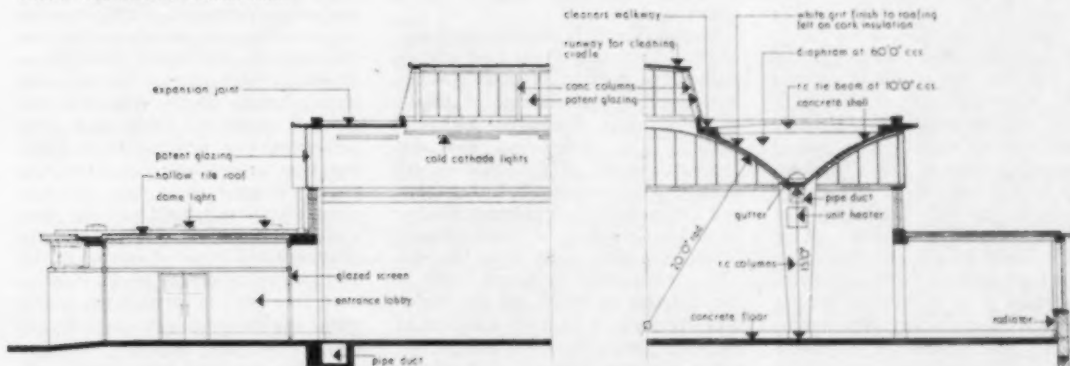
Externally: Buckinghamshire facing bricks in lime mortar. Precast concrete: open grain surface mixed Portland stone and limestone aggregate, etched surface. Rainwater pipes: cast iron. Windows: at lower level painted galvanized steel, in production area patent double glazing, aluminium alloy. Entrance screens and doors: Iroko. Fire-escape screens: softwood with doors only in Iroko. Internally: concrete left from shuttering emulsion painted. Brickwork: fair faced emulsion painted. Flooring: asphalt in workshop, grano' in entrances, lavatories and cloakrooms. W.c. cubicles: in Terrazzo, lavatories faced with Terrazzo tiles.

general contractor: John Lain[ing] & Son Ltd.

Asphalt Flooring: Limmer & Trinidad Lake Asphalt Co., Ltd. Boilers: Danks of Netherthorpe, Ltd. Bricks—Facing: Robert Y. Ames. Cold Cathode Fittings: Ionlite, Ltd. Cork Insulation: Cork Insulation & Asbestos Co., Ltd. Electrical Installation: T. Clarke & Co., Ltd. Expansion Jointing: Expandite, Ltd. (Flexcel), Micanite & Insulators Co., Ltd. (P.V.C.). Fencing: Peerless Fence & Products, Ltd. Filament Lamp Fittings: C. M. Churchouse, Ltd., Holophane, Ltd. Fire Alarm: Associated Fire Alarms, Ltd. Fixings: Rawlplug Co., Ltd., Philiplug Co., Ltd. Flat Roofs: Costain Concrete Co., Ltd. Flue Blocks: Marley Tile Co., Ltd. Fluorescent Fittings: Crompton Parkinson, Ltd. Glazing: Faulkner Greene & Co., Ltd. Heating: Young, Austen & Young, Ltd. Hydraulic Lime: East Anglian Cement Co., Ltd. Incinerators: Hygienette Manufacturing Co. Ironmongery: James Gibbons, Ltd. Joinery: J. Long & Sons (Bath), Ltd. Lighting Conductors: J. W. Gray & Son, Ltd. Manhole Covers: Broude & Co., Ltd. Mats: Tyre Products, Ltd. Paint: Sercon Paintmaker, Ltd. Painting: J. Higginbotham & Sons, Ltd. Patent Glazing: S. Warner & Son, Ltd. Perspex Dome Lights: William J. Cox, Ltd. Plastering: Pollock Bros. (London), Ltd. Plumbing: J. H. Shouksmith & Sons, Ltd. Precast Concrete & Cast Stone: Girdings Ferro-Concrete Co., Ltd. Pre-stressing System: P.S.C. Equipment, Ltd. Rigifix Column Guards: Huntley & Sparks, Ltd. Roads: Constable Hart & Co., Ltd. Roller Shutters: Shutter Contractors, Ltd. Roofing Felt: D. Anderson & Son, Ltd. (Boiler House), Macartney, Ltd. (Main Building). Roof Ventilators: Greenwood's & Alrvac Ventilating Co., Ltd. Sanitary Fittings: Suttons Sanitary Fittings, Ltd. Switchgear, Bus Bars and Trunking: Varilectric, Ltd. Syphons: Burn Bros. (London), Ltd. Terrazzo & Granolithic: Marriott & Price, Ltd. Unit Heaters: Copperad, Ltd. Windows (Metal): The Critical Manufacturing Co., Ltd.



Boiler house under construction



PART CROSS SECTION AND EAST END SECTION

SCALE: 1 IN = 16 FT

Old Buildings—A Problem and a Challenge

BY JOHN HARVEY, F.S.A., F.R.S.L.

ALL concerned with the problem of old buildings, and aware of national and local policy on the subject in recent years, must have been struck by the astonishing—and depressing—gulf between theory and practice. That there is a major problem has been recognized not merely by members of private bodies, but by national legislation and by complementary activity on the part of many local authorities. Much excellent work has been done, but there has been no general realization of the fundamental principles at stake. To some extent, these principles have even become obscured by the glow of complacency felt at what has already been done. In the last resort, members of Parliament and of the Church Assembly, local councillors and the man in the street are still thinking of "Ancient Monuments" as a luxury to be given (in the jargon of our times) a very low priority.

This deep-seated misconception lies behind many losses of irreplaceable buildings, sacrificed not to real necessity, but to an expediency based on a false relative scale of values. Only too frequently buildings are condemned, or their condemnation condoned, by the very bodies legally responsible for preservation, and in the teeth of keen and informed local opposition. Confidence in the efficiency of present measures is repeatedly shaken when important buildings scheduled under the Ancient Monuments Acts are swept away with official sanction; when large numbers of those recently given "protection" by Statutory Listing are removed from the Lists as soon as there is a conflict with other interests; when really determined vandalism wins all along the line.

Such deplorable results are the effect of a subconscious relegation of old buildings to a low category in the scale of human values. This scale usually finds material expression in the reduction of each individual case to financial terms. In part this is due to survival of the nineteenth-century belief in material progress which has so strongly coloured national education, in part to the spreading sense of man's helplessness in face of his own invention, engendered by the wars and social and economic unrest of our time. What is new is automatically accepted as an improvement, without further question.

That there is no real policy reflects the absence of any philosophy of conservation. Few supporters of protection for ancient buildings and works

of art could define the basis of their views. Is then the saying of the old (whether outworn or not) a mere sop to emotion, an affair of sentiment? Even if it were so, it does not follow that preservation would be unjustifiable. We need not hesitate in attaching a real value to what possesses both beauty and utility.

The recognition of beauty and utility is highly subjective, but in both qualities there is a relative, if no absolute, scale of values, and few will support the proposition that the more beautiful or useful should be destroyed to give place to the less so. Hence, since it is implicit in such listing as that carried out by the Ministry of Housing and Local Government that the listed buildings do possess these qualities in a high degree, it should be necessary to bring overwhelming evidence of an even higher standard attained by any new proposals which involve their destruction. Evidence of this kind can only be assessed by an independent tribunal, for the present procedure of ministerial enquiry is manifestly unsatisfactory.

Emphasis has commonly been laid upon the æsthetic and amenity values of ancient buildings, but material considerations have generally been overlooked. While some aged construction is unsound, a far greater amount has a longer expectation of life than the modern structure which may be put in its place. This is due to two causes: the lavish use of prime materials which was formerly possible; and the high level of craftsmanship attained in the building trade before the development of mechanization and of large-scale contracting. Medieval buildings in particular witness to the efficacy of provisions for the maintenance of a high standard at a time when the penalty for jerry-building was destruction of the offending work.

England formerly abounded in home-grown hardwoods of the best quality, widespread quarries of good building stone, and a vast number of locally exploited clays producing tiles and bricks. The timber has now disappeared, many of the quarries are exhausted or economically unworkable, and rationalization in industry has put an end to the supply of sound common bricks and tiles made near the site. The consequently increased rarity of the materials of which our old buildings are made is in itself a reason of the utmost importance for their preservation wherever possible. Indeed, the

irreparable loss to the nation caused by the wholesale destruction of work which it is impossible to replace with equally durable materials and workmanship is the most alarming feature of the situation. No nation can afford to waste its accumulated assets in so reckless a manner.

It is more than time that the country awakened to the squandering of its patrimony now in progress, a senseless destruction quite largely due to the people's own elected representatives in local government and elsewhere inadequately combated by those representatives. The remedy will only come when a national sense of indignation at such waste has been aroused, for nothing short of this can remedy abuses. To arouse this deep and burning indignation is by far the most serious problem for those who already realize the facts.

Conservation faces other serious problems of a technical character some of which relate to the causes of decay, others to the means of maintenance and repair. Two causes of decay are of overwhelming importance: damp, and atmospheric pollution. Against damp the only adequate safeguard is regular maintenance which in its turn means constant vigilance. It is usually decay due to damp (most frequently in the form of dry-rot) that transforms a sound asset into an unrepairable liability. Hence regular inspection, particularly of roofs and gutters, is the first requirement for all building conservation. This has been recognized in recent provisions for the maintenance of historic churches, but is still too little understood by building owners in general.

While decay due to a wet climate has been present throughout our history, the erosion of building materials in a polluted atmosphere is a relatively modern phenomenon. Public attention has recently been drawn to this, and the creation and rapid extension of smokeless zones provide the only complete solution. In the meantime, vast sums of money are being spent upon palliatives and repairs: sums which ought to be available for other purposes. Since erosion most seriously menaces masonry buildings, the technical problem is primarily one of the treatment and repair of stone. In this field scientific results of great value have been reached through the patient work, carried on for 30 years by the Building Research Station. So far, no substance has been found which will

act as a preservative without materially altering appearance, though coating with paint or with whitewash will act as a purely mechanical protection. Among palliatives, the best is undoubtedly cleaning by brushing with water only, or steam-jet, followed by hosing repeated regularly as a measure of normal maintenance. Washing, by removing harmful chemical salts, undoubtedly prolongs the life of masonry and allows original work to be retained for a much longer period before ultimate replacement with new material.

When replacement becomes unavoidable, there is normally a choice between natural and synthetic (plastic) stone. It cannot be too strongly urged upon building owners that the *wide-spread* use of synthetic materials is a false economy, besides being destructive of the permanent tonal values of the building. Plastic stone can be of real service when its use is limited to the making good of damaged details, where replacement with natural stone would involve the loss of more of the original, and would cause much greater disturbance to the fabric. But the refacing of large expanses of ashlar walling with synthetic material is completely indefensible and should never be accepted as the alternative to a certain degree of irregularity in a weathered and partially repaired surface. Repairs should always be limited to the minimum: in order to preserve as much of the original as possible for the longest possible time; to avoid the serious structural disturbance involved in complete refacing; and to spread the cost of repair. Indeed, it may fairly be laid down that the more closely repairs approximate to regular maintenance, the better they are.

It a fallacy to suppose that any repair or restoration, however costly, can put a building permanently in order. Experience of the very costly restorations, often amounting to virtual rebuilding, of the last century shows that these were appallingly wasteful, apart from the unnecessary destruction of old work which they involved. In many cases too, the work done was not only wasteful, but structurally inept and badly executed. Among the most serious of the mistakes made in Victorian times are the choice of poor and unsuitable stone, and its use in thin veneers inadequately bonded to the old core. It is noteworthy that certain of the buildings on which most money is now being spent (for example, York Minster and Westminster Abbey), are precisely those upon which most work was done in the nineteenth, and early in the twentieth century.

The correct treatment of old buildings calls for long experience on the part of the architects and the leading

craftsmen concerned. The subject cannot be learnt from textbooks, useful as are such works as the late A. R. Powy's *Repair of Ancient Buildings*, and the excellent technical treatises and articles on special subjects which have been produced by the Building Research Station and by members of the Ancient Monuments Department of the Ministry of Works. It is, for instance, admitted by research petrologists that no amount of scientific testing of samples can take the place of the personal experience in the choice of sound stone possessed by a well-trained master mason.

Consequently the problem of providing adequate training, both for architect-conservators and for craftsmen, is one of the most serious difficulties to be faced. The steadily lessening use of traditional materials for new building has greatly decreased the number of fully trained craftsmen in the key trades of masonry, carpentry and plumbing. To a certain extent this decrease has been offset by the special arrangements made by the Ministry of Works for training craftsmen, but their numbers are utterly inadequate to cover the needs of the country as a whole. To the many adverse factors present for a generation and more has now been added, a disastrous final blow, compulsory National Service. It is not generally known that the fully trained master craftsman of the type now so close to dying out, served not merely a minimum apprenticeship of five years, but one of six to seven years with a further three years as "improver" or journeyman before he was regarded as qualified. Furthermore, to obtain the best results, apprenticeship should begin at 13 or 14, rather than at 15, the present school-leaving age.

The effect of National Service has been felt so severely that it is no exaggeration to say that the skilled crafts are doomed unless total exemption is granted. Of the still fairly considerable though fast diminishing number of apprentices in the building trades, allowed deferment until the end of a five-year term, hardly any are prepared to return to a three-years' improvership after their period of service. All attempts to maintain a satisfactory level of craftsmanship are futile unless sufficient inducements are given to encourage apprenticeship, to enable the passed apprentice to complete his full training, and to provide him with proper employment at an adequate wage. At the present time the differential rates for highly skilled master craftsmen are so grossly inadequate that even of the few who can still maintain the best standards, a number are driven by sheer necessity to abandon their calling in favour of

some less skilled but more remunerative work.

Dismal as are the prospects in the building crafts, they are hardly more so than those in the architectural profession. For well over a generation it has been the practice of most of the schools of architecture in Britain to give only the most perfunctory treatment to history, while a thorough practical knowledge of traditional methods of construction is no longer a primary requirement, and even the capacity to make accurate measured surveys of old work is very generally lacking. Against such a background it is clearly impossible to train within a short time a sufficient number of architect conservators to deal with the thousands of ancient buildings throughout the country now in need of expert handling. No time is to be lost in putting the education of the conservator on an adequate basis of knowledge and experience.

Here, again, incentives are lacking. There must be some guarantee that the work of conservation will be entrusted only to those with the proper training and experience, before entrants to the profession will be likely to undertake the arduous work needed to acquire special qualification. This in turn depends upon the methods of qualifying open to the student, for it is clear that general insistence on specific qualifications can only be based upon acceptance of these as satisfactory. Here it is necessary to consider the type of entrant whom it is desired to attract, as well as the methods by which competence as a conservator can best be attained.

First, it must be recognized that the work of the conservator of ancient buildings demands a very high degree of patience and personal application; it is a dedication rather than a career. Architectural partnerships or offices of the normal type are seldom well suited to the purpose, and moreover in most cases deal to an overwhelming extent with the production of new buildings. The character of ancient and modern work differs so greatly that a mixed practice of this kind can very rarely be desirable. The conservator should be recognized as a special branch of the architectural profession, not in any exclusive sense, but in a way analogous to the present practice of specialists in town-planning.

Before considering in detail the ideal form which specialized training should take, it is worth studying the methods at present available. These methods are four in number:—

(1) practical experience as an assistant to an architect specializing in work on ancient buildings, or in the Ancient Monuments Department of the Ministry of Works;

(2) practical experience of various kinds organized by the Society for the Protection of Ancient Buildings for holders of their Lethaby Scholarship;

(3) academic and practical training given in the Certificate Course in Preservation and Restoration of Historical Buildings, instituted in 1950 in the Bartlett School of Architecture, London University;

(4) lectures and visits given in the special short courses arranged from time to time by the S.P.A.B. and from 1952 onwards by the York Civic Trust.

All of these apply to architects already qualified, or who, if they have not actually taken final qualifications, are in course of so doing. Of the four methods, the first is that which has produced almost all of those specialists now in practice and, however supplemented by more academic work, the need for such *long-term* practical experience remains essential. It does not, however, lend itself to any form of qualifying test, for which some other provision must be made.

Of the three more intensive types of course offered, that of the S.P.A.B. approaches most nearly to the ideal, consisting as it does of carefully arranged practical experience with different architects on various types of conservation work and surveys, opportunities to inspect craft processes and to attend conferences and lectures on related subjects. It suffers from the very small trust funds available, which limit the awards to a number far too low to have any appreciable effect on the general problem of training. In any case, the special virtue of the system is its highly individual approach, and it is hard to see how it could be extended to the training of considerable numbers of students.

Short courses of the kind organized at York have the value of being easily attended even by those actually in practice, and it has been found that they have in fact been extensively patronized by relatively senior architects, surveyors and others concerned. As a means of refreshing the conservator's knowledge of up-to-date methods of treatment, courses of this type have great possibilities, but they are obviously quite inadequate as a qualification.

There remains the type of course at present exemplified by that offered at London University. To provide for the country as a whole, similar courses would have to be instituted at other schools of architecture. Fundamentally, an acceptable formal qualification can only be provided on the basis of some such course and examination, but there is room for extension of the practical requirements before qualification is awarded. A substantial period of working experience of con-

servation (not less than three years) should be essential. On the other hand, it is already difficult for post-graduate students to undertake the present course. Not only must they attend several evening lectures weekly through some six months of the year, but during the remaining months produce two detailed restoration subjects and a thesis, and spend a fortnight upon a work of repair in progress. These are requirements by no means easy of fulfilment for those already in full-time employment or practice.

It seems clear that such courses would stand on an altogether better footing if they could be spread over a longer period, specialization beginning during the student's third or fourth year of the full-time course in architecture. This would enable a much greater emphasis to be placed upon the teaching of architectural history and traditional construction, and permit of senior students obtaining full-time practical experience of the right kind during the vacations. Such arrangements would also do a great deal to encourage adequate numbers of the younger generation to take up this study at the right period in their careers.

There should be no insuperable difficulties in effecting such a reorganization within the framework of the present system of professional education. But the progress of the social revolution may soon call for a more drastic reassessment of values. The architectural profession itself sprang from the ranks of those superior master craftsmen of the twelfth to eighteenth centuries, able to design and supervise the erection of major buildings. The superiority of the craftsmen must have been largely the result of better educational opportunities, but they remained craftsmen in that they all had first-hand experience of the manual skill required in the working of wood or stone. The weak point of the modern architect has always been that he is in the position of a musical composer unable to play a single instrument. It is by no means inconceivable that the progressive decline in the prosperity of the overtaxed professional class may drive its members to take a radically new view of their sons' education and prospects in life. It would be fitting if in some cases this new view were to take the form of apprenticing the professional man's son to one of those skilled crafts now in danger of extinction. Thus the architect might once more become the master craftsman, and the lamented gap between design and execution again be bridged.

The architect and the craftsman are two supports of a tripod, whose missing member is represented by the

supplier of materials. Here, again, very great difficulties are faced, partly because of the exhaustion of certain sources of supply; partly owing to the prevailing trend towards standardization and the accompanying growth of the middleman with no personal interest in the raw materials which he handles. To some extent these difficulties can be overcome, and by persistence and tireless pressure have been overcome in favourable cases. Quarries have been reopened, some attention is now given to the planting of hardwoods; concerted steps must be taken to find an economic basis for the local brickworks, the plumber who operates his own casting table, the thatcher and the plasterer.

I have painted a gloomy enough picture of the present position. This country faces a challenge, nothing less than the loss of the most tangible part of its traditional heritage. Once the nature of the challenge is realized, and the penalty of failure to meet it, there can be no doubt that it will be met. But our greatest enemy is time: already there has been too long delay, and action must be immediate. Tomorrow will be too late.

Note: This article is condensed from a pamphlet which was first printed as an article in the Transactions of the Ancient Monuments Society. The pamphlet is obtainable from Messrs. Batsford, 15 North Audley Street. Price 1s.

Lamorna Valley Appeal Dismissed

Mr. Duncan Sandys, Minister of Housing and Local Government, has decided to uphold the Cornwall County Council's refusal to allow more than limited building in the Lamorna Valley, Cornwall.

The Minister's decision follows an appeal to him by Mrs. E. N. M. Hill, of St. Buryan, against the refusal of the County Council to allow the erection of over 100 houses and a petrol filling station and the establishment of a caravan camp at Lamorna. Mrs. Hill later modified her proposal and at a local enquiry held by the Minister she asked permission to build 21 or 23 houses.

In dismissing the appeal, the Minister has informed Mrs. Hill that he supports the County Council's view that whilst limited development by individuals wishing to live in the Valley might not be objectionable if it was satisfactory in siting and other details, development of the type proposed by the appellant would be out of keeping with the surroundings. He agrees that the erection of rows of houses as proposed would seriously detract from the natural beauty of the Valley and that it would be wrong to attempt to create a demand for houses in the district by permitting the proposal.

The R.I.B.A. Circular Letter to Members

By MAURICE TAYLOR, A.R.I.B.A.

IF you are a member of the R.I.B.A. you will have received a printed letter dated April 25, 1955, from the secretary.

The letter deals with the subject of membership of professional societies whose activities are concerned with the architectural profession. Two paragraphs are worthy of quoting:—

"It is, in the Council's opinion, of the utmost importance to maintain the prestige and influence of the profession with Central and Local Government and other authorities. This can only be done if the profession remains completely united and allows no conflict or internal division of opinion to appear publicly. Obviously there are different points of view among members, but these should be discussed and resolved within the body of the profession. The Royal Institute is the proper organization for such discussion, and adequate machinery is available through the committees of the Royal Institute and the Allied Societies' Conference."

"In recent weeks there have been moves, attended with some publicity, towards the formation of Societies of Private Practising Architects in London, the Midlands and the west of England. The Council do not suggest that members must not discuss their individual interests, but they hold strongly that this ought to be done within the framework of the R.I.B.A. and its Allied Societies."

Those of you who have strayed from the path can consider yourselves gently but firmly rebuked. There is no mention of the party Whip being withdrawn from members who join one of these societies so the matter may end with this letter.

It is rather surprising to the ordinary member at least, that the Council instructed this letter to be sent to members. It reveals that everything is far from right within the ranks, or alternatively everything is not right within the portals of No. 66, Portland Place. Perhaps the former is a result of the latter. This assumption on my part will no doubt be hotly denied but what else can one read into "there have been moves towards the formation of Societies of Private Practising Architects."

Presumably some private architects are dissatisfied with the influence the R.I.B.A. are exerting on their behalf. This state of affairs must be amusing to the official architects who have in the past been the Cinderella of the profession and who, I would remind private practitioners, received until recent years scant attention from the Council.

The letter quite rightly points out that "the Council do not suggest that members must not discuss their individual interests, but they hold strongly that this ought to be done within the

framework of the R.I.B.A. and its Allied Societies." This I would be the first to agree sounds all very well in theory but does it work out in practice? The answer is, for a number of reasons, No. Do not jump to the conclusion that I am laying the blame on the R.I.B.A. and the Allied Societies, although I feel that there is room for improvement in both these camps, but the main bulk of the blame must be laid at the feet of the individual members who make up the R.I.B.A.

How many really take an interest in their local Allied Society? I wonder how many of the members who are sponsoring the formation of the London Society of P.P.A. attended the Annual General meeting of their Allied Society? Allied Societies will not function unless members take an active interest in them and leave the work to the faithful few to see that they do not die through lack of interest.

If you have a grouse take it to your Society and ventilate it. If you do not get satisfaction write to the R.I.B.A. or alternatively there is always the correspondence column of the architectural papers.

Do you take an interest in the publications the R.I.B.A. send you? Have you read your Annual Report? What do you do with the Journal? The majority of architects, I fear, just cannot be bothered: Sorry, they would claim they were far too busy to read these publications. The R.I.B.A. cannot be blamed for this lack of interest. If you feel the Journal is far too high-brow or could be improved write to the Editor and put forward your suggestions for improving it to make it more readable. I know he will be delighted to hear from you.

Let us be honest with ourselves. Architects are good at grousing but as businessmen we fail in certain respects. We leave the running of our Institute to someone else but appear to forget that the R.I.B.A. is, after all, us. I can hear you saying, "No, not quite us. I know I can vote for the members who can represent me on the Council but they are the 'Big Boys'." What hope has a small private practitioner or the unknown local authority assistant of obtaining a seat on the Council? My answer would be, very little hope. Look through the names of the 30 members who are elected and they are all well-known names in the architectural world. It could be argued that they have been successful and therefore are the right type of person to run our Institute. Do they really represent the various sections of our members?

It will be interesting to read the report of the *ad hoc* committee set up to review the constitution of the Council. The report has been completed and it is to be submitted to the

Council at an early date. Will the comments of the Allied Societies be sought? Here is an opportunity for the Council to allay the fears of many members that the R.I.B.A. is run by the Big Boys for the benefit of the Big Boys.

I do not think that the R.I.B.A. is altogether blameless for this feeling of frustration on the part of a number of its members. It has fallen into the same democratic groove as many other large bodies. A point is raised at a Committee meeting, it is submitted to a sub-committee to consider. In due course the findings of the sub-committee are submitted to the committee and perhaps have to go to the Council. Oh yes, the matter is dealt with, but oh, how slow.

The R.I.B.A. hides its light under a bushel or perhaps it would be more correct to say behind the words "Private and Confidential."

These three words, like rationing, became a feature of the war period. This was understandable when it was essential that certain documents and their contents should not fall into dangerous hands. We all accepted the situation. We did, however, work for and look forward to the day when rationing and such restrictions as "private and confidential" would disappear or be used only when the matter really was private and confidential.

Rationing has gone, the words "private and confidential" have not; in fact I feel it would be safe to say that their use has increased. During the war they used to be typed on documents; now, note, the R.I.B.A. has a rubber stamp.

I would venture to ask who states whether a document has to be labelled "private and confidential"? Is it the committee who were responsible for preparation of the document or is it left to the discretion of a clerk? I hope that this point may be cleared up by a member of the Council who, like myself, wishes to see that the work of the R.I.B.A. receives more publicity.*

Why is there so much reluctance on the part of the R.I.B.A. to allow documents to receive publicity? Why, for instance, should the recent memorandum on the Appointment of Architects as Chief Officers to Local Authorities be labelled "Private and Confidential"? I have read this memorandum with interest and see no reason why it

Here it is.—Ed., A. & B. N.

* Only documents that are "P. and C." are labelled so—they are also "P. and C." during any time that matters are sub judice in committee or council. That so many documents are so labelled is a reflection on the discretion of the membership (and thus includes sometimes members of committees and even councils).

should not receive publicity in both daily and architectural presses.

What has the R.I.B.A. to fear? Their deliberations are conducted by members appointed by the rank and file of the profession to look after their interests. The rank and file are anxious to know what is being done on their behalf.

If these documents were headed by the word "secret" the producers would become the laughing stock of the profession; if you turn up the word "private" in your dictionary you will find "private" means "secret." Really—are these documents on the same parallel as the secret documents that we received during the war? I venture to suggest that there is no comparison. Secret from whom? The enemy of course. Who, may I ask, is the enemy—the rank and file of the architectural profession? That, then, must be you and me. Who put the members of the Council in? You and me, but we did so hoping that we should have the pleasure of hearing of their deliberations on our behalf.

Does the R.I.B.A. command the respect and bargaining power in this country of some of the other professional institutes? I doubt it and would venture to suggest it is to a certain extent because it hides its light under a bushel or behind these words as "private and confidential." Our institute could become a real driving power amongst the professions but not if it is dominated by fear. Fear of what, you may well ask; so do I? Fear of getting into bad grace or saying the wrong thing at the wrong time?

Let those responsible for this "private and confidential" attitude throw away the rubber stamp and tell the profession what they are doing on their behalf.

It is this feeling of frustration and lack of knowledge that is causing the unrest within the profession. A letter pointing out that one must not be naughty and join another society is not the remedy.

As a tailpiece to this article, I have permission from two well-known members of the R.I.B.A. in private practice to print their reply to the circular letter together with copies of the cuttings to which they refer in their letter.

*The Secretary,
The Royal Institute of British
Architects,
66, Portland Place,
London, W.1.*

Dear Sir,

In reply to your circular letter of April 25, we wish to state that we agree that it is most undesirable for any architects, whether private or salaried, to form separate societies from the R.I.B.A. We note that some private practising architects, however, feel that the R.I.B.A.

is not serving their interests, and we are not surprised at this. The private practising architect has no doubt formerly enjoyed a wide choice of work, but it is now only the salaried architect who can earn an adequate living free from constant worry (except, perhaps, a few big private firms).

We enclose herewith a cutting from the *Eastern Daily Press* of April 27, from which you will see the complaint of the Yarmouth Education Committee's architect that he is unable to complete his many buildings owing to lack of staff. Yet this department does not attempt to employ outside practising architects so far as we know, and the same can be said of Norfolk and Suffolk County Councils, Norwich, Yarmouth and Lowestoft Borough Councils, etc.

Will the R.I.B.A. please take the step of suggesting in the present instance, and in all similar cases, that this obvious excess of work in the hands of these public departments is distributed among private architects? This you will appreciate is done in some areas, but to such a limited extent that the private architect is in serious danger of becoming extinct.

We ourselves have for many years now conscientiously done housing work, and achieved some reputation for this, but we are not aware that the R.I.B.A. realizes how impossible it has been for the private architect to make housing work even cover his costs. In our own case we have never received more remunerative work from the R.I.B.A. or from official Architects. Others in the same situation are evidently feeling their loyalty to the R.I.B.A. unduly strained.

We would be grateful if you would pass this on to the President and the appropriate committees, and also act as suggested above in respect of the enclosed cutting. We would also add that three of our own staff have recently been taken away by Local Authority Architects, yet evidently, to judge from the enclosed newspaper, they still have not enough staff, but they do have too much work! The remedy is obvious, but if delayed much longer the patient will be dead.

Yours faithfully,
Tayler & Green.

Copy of News Item from *Eastern Daily Press*, April 27, 1955. Hold-up for Yarmouth School Plans

Difficulties caused by staffing shortage in the schools architect's department at Yarmouth were mentioned several times during yesterday's meeting of the Education Committee. Mrs. K. M. Adlington (chairman) said the department "was

stretched to the limit" and many hours of honorary overtime were being worked. It was reported that no replies had been received to advertisements about a vacancy for a senior assistant architect, and that the only two suitable applicants for a post as clerk of works had withdrawn. These difficulties, it was stated, would inevitably delay the extensions to the grammar school and the secondary modern school at Gorleston.

The committee agreed to suggest that the grading of senior architectural assistants should receive special consideration in the review of salaries now in progress.

Timetable

Later it was reported that the staffing difficulties had made it impossible for the department to keep to the original timetable for the preparation of drawings for the proposed new High School for Girls, and that it would not be possible to submit tenders to the April meeting as originally intended. It was agreed to hold a special meeting for this purpose on May 16.

Fourteen new stoves are to be installed at the Nelson and St. George's Schools, at a cost of about £301, and central heating installation will be put in hand as soon as possible. The General Purposes Subcommittee had received a petition signed by 53 parents of children attending St. George's Infants' School drawing attention to the inadequate heating.

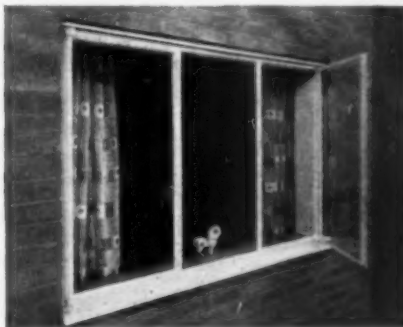
Amendments calling for the work for the main scheme to be done over the Christmas period—the Schools Architect (Mr. F. Jackson) said this must depend on his getting more staff—and for it to be completed before the autumn term, 1956, were defeated.

BOOKS RECEIVED

- Architecturally Speaking.* By Eugene Raskin. Published by The Reinhold Publishing Corp., New York. (Chapman & Hall.) Price 28s.
- A New Description of Sir John Soane's Museum.* Published by the Trustees. Price 2s 6d.
- Applications for Planning Payments.* By A. E. Telling, M.A., and F. H. B. Layfield, A.M.T.P.I. Published by Butterworth & Co., Ltd. Price 38s 6d.
- Building Construction* (three volumes in one). By W. B. McKay. Published by Messrs. Longmans, Green & Co., Ltd. Price 45s.
- The Building of Ancient Egypt.* By Helen and Richard Leacock. Puffin Picture Book No. 101. Published by Penguin Books, Ltd. Price 2s 6d.
- British Plastics Year Book 1955.* Published by Iliffe & Sons, Ltd. Price 30s.
- Building Check List.* By Ben John Small. Published by The Reinhold Publishing Corporation. Price 28s.
- Brick Laying Skill and Practice.* By Dazell Townsend. Revised Edition. Published by Technical Press, Ltd. Price 28s.
- Church Building and Furnishing.* By J. O'Connell. Published by Burns and Oates. Price 21s.
- Cost Savings Through Standardisation, Simplification, Specialisation in the Building Industry.* Report by the United States Department of Labor. Published by the Organization for European Economic Co-operation.
- Portrait of Cambridge.* By A. F. Kersting and B. Little. Published by B. T. Batsford, Ltd. Price 25s.

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In Parliament

Riverside Lights

Lieut. Col. Lipton asked the Minister of Housing and Local Government what limits he had decided to impose on the size of electric signs on the south bank of the Thames. Mr. Sandys stated that no hard and fast standards were applied. Lieut. Col. Lipton said the Lambeth Borough Council had been trying to impose a limit of 3ft on the size of lettering on these signs, but in every case where an aggrieved advertiser had appealed the Minister had decided against the Council. "Has the Minister any idea to what limit these signs can go?" he asked. "Or is the sky the limit? An application is pending for a sign with letters 13½ft high." Mr. Sandys recalled that he, like Lieut. Col. Lipton, had once been an M.P. for Lambeth, and assured him that he had no prejudice against it. (May 3.)

Housing for the Electors

Wing Cmdr. Bullus asked how many new houses had been built in England and Wales since Oct., 1951, and was told that up to the end of March, 1955, the number completed was 903,563. Wing Cmdr. Bullus congratulated the Minister and his predecessor on this magnificent performance (Conservative cheers) and asked if he had the figures for the whole of Great Britain during the same period. Mr. Sandys said he had not the precise figures, but he could tell the House that since the present Government had been in office well over one million houses had been built. (More cheers.) Mr. Jay asked how many of those houses were begun before the Labour Government left office. (Opposition cheers.) Mr. Sandys said it did include houses which were started before the Conservatives took office, but the position at the end of March showed that the carry-over from the present Government would be considerably greater than the carry-over in 1951. Mr. Shinwell asked if the question was by any chance associated with the coming election. Mr. Sandys: I did suspect that the supplementary question from Mr. Jay had some connexion with it. (Laughter.)

Council House Sales

Mr. Sorensen asked how many local authorities had made available for purchase houses that they owned, and how many had been sold. Mr. Sandys stated that up to the end of March 3,387 council houses had been sold by 288 authorities in England and Wales. Mr. Fernyhough said that since the Minister took such pride in his house-building achievements could he say, in view of the fact that brick production had gone up by only seven per cent, what the Tories had failed to build which ought to have been built? (Opposition cheers.) Mr. Sandys: I

cannot see a connexion between that question and the original one, but I am entitled to say that I regard it as inconceivable that a party with such a building record could fail to be returned at the next general election. (Loud Conservative cheers.) (May 3.)

Accident Rate and Causes

Dr. Barnett Stross asked the Minister of Labour to what causes he attributed the increase in the accident rate in the building industry by 50 per cent between the years 1948 and 1953 in spite of the introduction of his regulations in 1948; and how he proposed to lower the rate at which men are injured in this industry. Mr. Harold Watkinson, the Parliamentary Secretary, replied that the apparent increase in the accident rate at building operations could be attributed, in part at least, to the efforts constantly being made by the Factory Inspectorate to secure a better understanding by employers of their obligation to report accidents in accordance with the provisions of the Factories Act. Fatal accidents, which were reported almost without exception, had not increased. The accident rate would be reduced by better observance of the

gree of sub-contracting done now. The main contractor had no responsibility for the plant and equipment, and many sub-contractors were working on a shoe-string. Mr. Watkinson said that he would not like to accept that as the main cause by any means.

Mr. Elwyn Jones said there had been evidence in recent cases of ignorance of the terms and conditions of the regulations. Wider publicity might make some contribution to the problem. What had been the result of prosecutions for non-compliance with the regulations? There was disturbing evidence of widespread failure to comply with them, and it was important to know what action had been taken. Mr. Watkinson replied that the Chief Inspector was making a special investigation to see what could be done to make the regulations more widely known. (May 3.)

Labour Force Analysis

The Minister of Works supplied in answer to a question by Mr. Sparks on May 3 the following analysis (in monthly averages) of labour employed in the building and civil engineering industry in Great Britain:—

These figures exclude the building

	Total (all Building and Civil Engineering Work)	New Work					
		Houses		Schools		Industrial Building (a)	
		Thousands	Thousands	Per cent	Thousands	Per cent	Thousands
	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)
1951	990	230	23	38	4	129	13
1952	974	264	27	36	4	124	13
1953	988	311	31	34	3	120	12
1954	978	315	32	31 (b)	3	119 (b)	12

Safety Regulations on the part of the employers and workers, and the Factory Inspectorate would continue to give close attention to ensuring that these obligations were understood and complied with. The Chief Inspector was carrying out a special investigation of accidents on certain building operations to see whether any further action could usefully be taken.

Dr. Stross said that these regulations were perhaps the most advanced in any industry. The fact that there had been an apparently significant increase in the accident rate suggested that there was repeated breach of the regulations. Would the Minister change his mind about safety committees, and have their existence enforced by statute rather than leaving them entirely to voluntary creation? Mr. Watkinson said "No." The problem was to get the existing regulations properly carried out, and that was a matter for the inspectors.

Mr. Lindgren said that both the frequency and severity of accidents had increased, and those in the industry attributed it in part to the greater de-

trades workers directly employed by local authorities, public utilities and private firms in other industries.

(a) The figures include the contractors' labour force employed on the erection of factory and storage premises and on gas, electricity, transport and communications.

(b) Figures for the last quarter of 1954 have been estimated.

Flats on Expensive Sites

Mr. Lindgren asked the Minister of Housing and Local Government how many flats drawing the expensive-site subsidies had been built each year since 1949; and what was the total value of these subsidies.

Mr. Sandys stated that the number of flats built since 1946 in respect of which higher subsidy had been claimed was about 65,000, and the annual rate of subsidy on these flats was approximately £3,000,000. Comparatively few flats of this type were built before 1949. (May 4.)

Continued overleaf

Development Claims

Mr. Sandys informed Mr. MacColl that there were some 415,000 established claims in England and Wales under the Town and Country Planning Acts, representing a total development value of about £350 millions. The area to which they related was not known. (May 3.)

Grants for Older Houses

Mr. Dodds asked the Minister of Housing and Local Government for a statement on the initial effect of the Housing Repairs and Rents Act on the checking of decay of older houses. Mr. Deedes, Parliamentary Secretary, told him that there had recently been a great increase of interest in this question. In the seven months after the Act came into force about 15,000 improvement grants were approved, compared with about 12,000 in the previous five years. About 1,100 local authorities were operating the scheme.

Mr. Dodds said that spokesmen of the various property owners' organizations had stated that the Act was failing. Mr. Deedes replied that in the last seven months they had done ten times better than in the preceding five years. Mr. Paget asked whether fewer men were engaged on repairs to-day than six or 12 months ago, and whether the effect of the Act had been to transfer an already insufficient repair capacity from repairs that really needed doing to those which were done to qualify for an increased rent. Mr. Deedes said that he did not accept the implication in the question. (May 5.)

London Square Garages

The Minister of Transport told Mr. Russell that he was not yet able to make any statement about the plans for garages under London squares. Mr. Russell asked when a decision would be reached. He realized that the subject was difficult, and involved consultation with many local authorities, but it was urgent. Mr. Boyd-Carpenter said this was a difficulty which was much concerned with many other aspects of the parking question, and he would rather not name a date. Viscount Hinchinbrooke said that there was much controversy about the matter, and urged the Minister to give an undertaking to postpone any positive action by the department until there had been an opportunity for an early debate in the new Parliament. Mr. Boyd-Carpenter agreed that there was not general agreement on the subject, and said it was not likely that a statement would be made in the near future. (May 5.)

Industrial Building

The President of the Board of Trade informed Mr. George Thomson that compared with the previous year the area of industrial building granted location approval in 1954 showed an increase of 94 per cent in Scotland and of 87 per cent in England. The corresponding figures for industrial building

started were 25 per cent and 47 per cent and for industrial building completed, a decrease of 7.6 per cent and an increase of 25 per cent. (May 5.)

Airways Terminal Site

Mr. Boyd-Carpenter, Minister of Transport and Civil Aviation, announced that the committee formed last year to make recommendations as to the site for a central airways terminal in London for use by all airlines, after considering a number of sites and projects, some of which were brought to their attention by private interests, unanimously recommended that the best site for the terminal was an open triangular site on the Cromwell Road near to Gloucester Road Station formed by the convergence of the District and Inner Circle Railways. He had accepted the committee's recommendation, and the London Transport Executive had agreed to lease the site for this purpose. It was proposed to construct a deck over the railway lines upon which the terminal buildings and coach station would be erected. The design of the decking would be done by the London Transport Executive. The project would be financed and developed by the airlines themselves. The London County Council, as planning authority, would regard such a use of the site as acceptable, but there would later be a formal application for planning consent when detailed proposals had been formulated. (May 5.)

I.U.A. Fourth International Congress

The main theme of the Congress which is being held at The Hague, July 11-16, 1955 is "Housing from 1945 to 1955," which is to be discussed under three main heads.

"Programme"; "Project"; "Production."

"Project" is subdivided into Independent Designs, Type Plans and Equipment.

Each of these topics will be discussed at a Plenary Session of the Congress when a paper will be read by the appointed rapporteur. This discussion will be followed up in a series of Working Sessions.

Background for the discussions will be supplied by a comprehensive international review of Housing since the war, specially prepared by Professor J. H. Van den Broek in association with the Bouwcentrum, and based on the answers to a detailed questionnaire circulated to the member nations of the I.U.A.

The United Kingdom has contributed to this publication and it is also sending an exhibition of post-war housing to The Hague to be shown as part of the I.U.A. International Exhibition. The U.K. Exhibition is being produced by the Building Centre and is to be on view there from May 18, when it will be opened by the President of the R.I.B.A.

The following have been nominated

to attend the sessions on Housing 1945-1955 as representatives of the United Kingdom:—

Mr. Peter Shephard (Programme), Mr. G. Anthony Atkinson (Project), Mr. Gontran Goulden (Production).

At the invitation of the President of the Congress Mr. Anthony Chitty will be acting as Chairman at the working sessions on Equipment.

The Congress will also devote some of its sessions to the discussion of two subsidiary themes—Architectural Education and The Place of the Architect in the Community. The United Kingdom will be represented at these sessions by Professor R. J. Gardner-Medwin and Mr. J. M. Austin-Smith respectively.

Sir Patrick Abercrombie will attend the Congress as President d'Honneur of the International Union, and Professor Robert Matthew as the United Kingdom's representative on the I.U.A. Executive Committee.

The delegates have been appointed by the I.U.A. or by the R.I.B.A. to ensure that the United Kingdom is properly represented, but it is hoped that many other British architects will attend, in a private capacity. This is the first occasion on which an I.U.A. Congress has been held within easy reach of Great Britain and is an opportunity that will not occur again until 1959, when the VIth International Congress of the I.U.A. will be held in London.

Towns and their Hinterlands Map

An analysis of bus services has provided the basis for a new official map showing how far each town and city of Great Britain serves as a centre for the surrounding areas.

The map is the latest edition to the series of "Ten Mile" Planning Maps sponsored by the Ministry of Housing and Local Government and the Department of Health for Scotland.

In essence the map shows areas of social and economic interdependence, and often of marked community of feeling.

The map (on the scale of 1/625,000) is available from the usual Ordnance Survey agents in two sheets (Sheet 1, Scotland and N. England; Sheet 2, the remainder of England and Wales), price 5s per sheet. An explanatory bulletin will be published shortly, price 9d.

R.I.B.A. Examination for the Office of Building Surveyor Under Local Authorities

At the R.I.B.A. Examination for the office of Building Surveyor under Local Authorities held on April 20, 21 and 22, 1955, eleven candidates presented themselves and the following were successful:—Edward Ashworth; Arnold Cherrington; John Ford; Clifford Baines Learmount; Trevor Lloyd; John Russell Parry; William Morgan Thomas.

LONDON AIRPORT

New terminal buildings and access tunnel



AIR TRAFFIC CONTROL BUILDING



Left:—
PASSENGER HANDLING BUILDING

London Airport Contracts—for the Ministry of Transport and Civil Aviation (Air Ministry Directorate of Works) include: Nine-storey Air Traffic Control Building. Three-storey, 600 ft. x 250 ft. Passenger Handling Building. Three-storey Eastern Apex Building. Main concrete Foundations, Roads, Drainage, Pedestrian Tunnel and Ancillary Works—Central Terminal Area.

Architect:

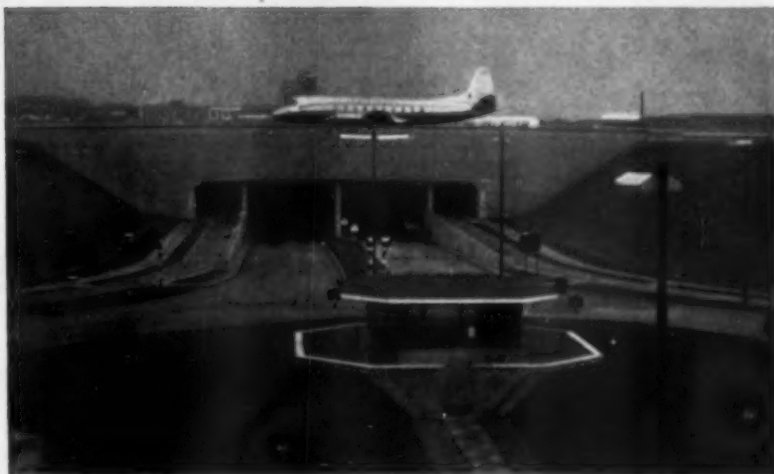
Mr. Frederick Gibberd,
C.B.E., F.R.I.B.A., M.T.P.I.

Consulting Engineers:

Sir William Halcrow & Partners.

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The system is automatically controlled and requires practically no attention. It operates by ducting warm air into every room in the building by way of small outlet grilles in the walls. It does away with boiler rooms and space-taking, dust-trap equipment. It cuts out dirt and labour — increases comfort and healthy circulation of air without draughts.

Radiation's Whole-House Warming system for business premises, houses, flats and public buildings, gives the same smokeless combustion and efficient heating, whether a gas, oil or solid fuel-burning unit is used. Any of these units can be specified to provide an integral and exceptionally efficient low-cost water heating system. For more detailed technical information, please write to our Chief Consultant.

The unobtrusive oil-burning unit fits neatly into a recess.



Warm air is ducted in every room in the building. Temperatures can be adjusted to the needs of the day and hour. Note warm air grilles above skirting.

BUILDERS: F. B. LUCAS LTD.
MALVERN LINK.

WHOLE-HOUSE
WARMING BY

Radiation

PIONEERS OF
SMOKE REDUCTION

INDUSTRIAL NOTES

● Mr. G. H. E. Vivian has been appointed a director of The Limmer & Trinidad Lake Asphalt Co., Ltd.

● The Minister of Supply has made an Order increasing the controlled prices of cast iron scrap in most areas. The Order, the Iron and Steel Scrap (Amendment No. 1) Order, 1955, can be obtained from H.M. Stationery Office.

● At a meeting of the Council of the Institution of Production Engineers, held at its headquarters, 10, Chesterfield Street, London, W.1, the principal officers for 1955-56 were elected. The President is Sir Leonard Lord, K.B.E., chairman and managing director of The British Motor Corporation.

● A new product of J. Avery & Co. (Est. 1834), Ltd., of 81, Great Portland Street, London, W.1, is the "Welfold" door. It consists of hardboard panels covered in felt and finished in Vynide fabric. When closed, the door folds back neatly as each division is a little over four inches wide; and the head member which has cadmium-plated rollers running on vulcanite strips can be recessed if required.

● The new address of the Zinc Development Association and its affiliates, the Hot Dip Galvanizers, the Zinc Alloy Die Casters and the Zinc Pigment Development Associations is 34, Berkeley Square, London, W.1. Tel. Grosvenor 6636.

● The Seventh British Electrical Power Convention and Exhibition is to be held at Brighton from June 27 to July 1. The President of the Convention is Sir Harry Railing, D.Eng., Hon. M.I.E.E., and the Vice-President is Sir John Dalton, A.M.I.E.E., F.C.I.S.

● Mr. Arthur Dawson, A.C.A., has been appointed managing director of Celotex, Ltd., North Circular Road, London, N.W.10. Mr. Desmond B. Rodgers has been appointed secretary in succession to Mr. Dawson.

● The annual general meeting on Wednesday, May 4, marked the 21st anniversary of the incorporation of the British Oil Burner Manufacturers Association, Ltd. The principal guest at the luncheon which followed was the Hon. L. W. Joynson Hicks, M.P., Parliamentary Secretary to the Ministry of Fuel and Power. Re-elected were Mr. J. R. C. Boyce (British Oil Burners, Ltd.), President; Mr. J. D. Fitzgerald (Combustions, Ltd.) and Mr. F. C. Pillinger (G. C. Pillinger & Co., Ltd.), Vice-Presidents; Mr.

R. H. G. Sutton (Urquhart's (1926), Ltd.), Honorary Secretary. Other members of council are: Mr. W. A. Hubbard (Hubbard Combustion, Ltd.), Mr. P. A. Martin (May Oil Burner (England), Ltd.), Mr. W. C. J. Mollison (Todd Oil Burners, Ltd.), Mr. H. F. C. Newsom (Nu-Way Heating Plants, Ltd.), Mr. A. M. Wood (The Wallsend Slipway & Engineering Co., Ltd.).

● The members of the Federation of Master Builders, London Region, were given a civic reception in a steamer on the Rhine on the 16th. Travelling in two planes they made a five-day visit to Cologne and Dusseldorf to study contemporary German building practice in reconstruction work on a number of sites. The party of 60 included several delegates from allied interests in the trade including Mr. J. E. Turgoose of the Marley Tile Co. whose German factory Deutsche Marley provided the interpreters.

● Williams & Williams, Ltd., have appointed Mr. L. Parker as manager of the Newcastle office at 51, Grainger Street, Newcastle-on-Tyne, 1. He succeeds Mr. S. J. Saunders.

● Mr. Harold Rose, B.Sc., F.R.I.C., A.M.I.Chem.E., has been appointed deputy managing director of Expandite, Ltd.

● The Ministry of Works Building Plant Exhibition, which is to be held on the Queenslie Industrial Estate, Glasgow, from June 8 to June 15 inclusive, will be opened by the Rt. Hon. Lord Bilsland, K.T., M.C., D.L., L.L.D., Hon. A.R.I.B.A.

● Mr. Douglas N. Dale, who has for the past five years been advertising and publicity manager of Simplex Electric Co., Ltd., is now advertising and sales promotion manager of Dimplex, Ltd., of Totton, near Southampton.

● The Duke of Edinburgh is to visit the Aluminium Exhibition at the Royal Festival Hall during the morning of June 3. His Royal Highness will also lunch with the President and Council of the Aluminium Development Association and leading personalities connected with the industry aboard the *Wellington*.

● Messrs. Carfrae & Morrison, civil engineers, Edinburgh, are to be invited to prepare a plan for the proposed underground car park in East Princes Street, Gardens, Edinburgh. The firm has been invited to prepare a scheme on the lines of the sketch plans submitted, and to report on the costs involved.



The Beal, designed by G. K. Phillips, A.R.I.B.A. and made by the Avon Fire-plate Co. of Bristol, seen at the B.I.F.

● Hose pipes of all diameters, by George MacLellan & Co., Ltd., can now be supplied with the purchaser's name and address heavily embossed on the rubber, or in the case of a canvas hose, with a nameplate welded to the coupling. MacLellan's are making no charge for this service.

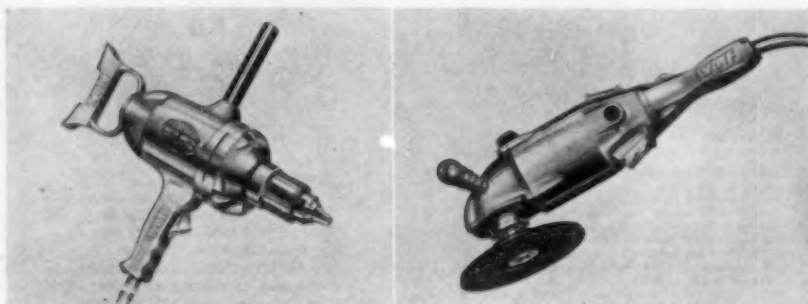
● An Harlequin design is the latest addition to the already colourful range of Marley thermoplastic floor tiles. Twelve variations are available in this unusual and confetti-like pattern, which makes the jointing disappear and gives the effect of sheet flooring.

● Mr. Bryan Archer, A.R.I.B.A., A.A.Dip., has been appointed Architect (Technical Development) to Gliksten Building Materials, Carpenters Road, Stratford, London, E.15. Mr. Archer will mainly be concerned with "Glinex" Structural Insulation Panels for which Gliksten Building Materials are sole concessionaires in the United Kingdom.

● The Glass Manufacturers Federation is holding a competition for art students of colleges and schools of art in the U.K. and employees of glass manufacturers to commemorate the opening of its premises at 19, Portland Place. There are three classes of entry: oil paintings, water colours and lithographs, and the subjects are: winning raw materials; production processes; uses of glass and landscapes. Prizes from 35s to 10s are offered. The judges will be Mr. E. A. S. Alexander, President of the G.M.F., Mr. Alan Clutton-Borock; Prof. R. Y. Gooden, R.D.I., and Sir Gordon Russell, R.D.I. Full particulars and entry forms are obtainable from The Secretary, Glass Manufacturers Federation, 19, Portland Place, London, W.1.

● The new address of Borax Consolidated, Ltd., is Borax House, Carlisle Place, London, S.W.1. Tel.: Victoria 9070.

● Mr. J. H. Hawkey has been appointed general manager of Sir W. A. Rose & Co., Ltd., one of the Berger Group of paint companies. Mr. H. Alexander, who has been managing director of the Rose Co. for the past six years has now left them to take up further responsibility on the administrative side of Lewis Berger (Great Britain), Ltd.



Two electric power tools by Wolf Electric Tools, Ltd. Left: The half-inch heavy duty drill and right, a seven-inch heavy duty portable sander, seen at the B.I.F.

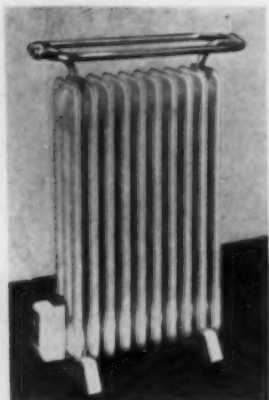
MOSAICS

FITTINGS

MISCELLANEOUS

C11/8

A new polished chrome towel and airing rail attachment for their oil-filled electric safety column radiator has been produced by Hursel Ltd., of 229 Regent Street, London, W.1. The towel rail attachment bolts on to the radiator, overhanging it at each end and at the sides. The polished chrome provides a surface which will not catch or damage clothes. The airing rail is made in two sizes, 20in and 30in long for the 1 kW and 2kW column radiators, respectively.



PLANT

LIFTING GEAR & HOISTS

E6/14

The "Mobile Junior" hoist is manufactured by Wickham Engineering Co. Ltd., of 215-218 Dashwood House, Old Bond Street, London, E.C.2. Erection can be carried out and the hoist operated by one man single-handed. The winch is fitted with heavy duty self-aligning ball bearings on the drive shaft and roller bearings with a hardened shaft on the drum. The brake is self-aligning and the winch can be quickly removed for maintenance. The engine may be either 2½/3 hp., petrol, diesel or electric. The carriage is of shaped, pressed steel channels and safety devices are incorporated to prevent the carriage falling in the event of wire rope failure. The hardwood platform is 5ft. 6in x 2ft. 6in. Height of mast: 20ft self-supporting and up to 50ft supported. Lifting capacity: 5 cwt. Platform speed: 90 ft per minute.



FITTINGS

SINKS, BATHS, ETC.

C2/27

Sheer Metalcraft Ltd., of Weybridge, Surrey, have produced a new addition, Model 75, to their "Sheer Pride" range of sink units. This model incorporates a vitreous enamelled top 21in x 42½in and comprises two cupboards, one with shelf and one drawer. The unit is fitted with plug type waste and the tops can be pierced for either mixer or pillar taps. Bases only can be supplied to those who wish to fit their own tops. Finished in a wide choice of colours.



SERVICES

ELECTRIC WIRING

ACCESSORIES

B5/49

Available in shockproof and metal-plate patterns, the new "Crabtree" 13 amp. flush switched socket-outlets and socket-outlets will blend with any decorative scheme. Manufactured by J. A. Crabtree and Co. Ltd., Lincoln Works, Walsall, Staffs., they are designed to harmonize with the "Lincoln" type A.C. flush switches. Twin units can also be supplied. All units have nylon shutter-operating cams and this material is also used for the dollies of the switched socket-outlets. The shockproof patterns are supplied in brown and cream and the metal units are either bronze or chromium plate.



Industrial Notes

continued

● At the annual general meeting of the Aluminium Development Association, held in London on April 22, Dr. Horace W. Clarke (Chairman and Managing Director of James Booth & Co., Ltd.) was elected President.

● An exhibition with the title "Lighting and the Architect" is the second exhibition in the new showroom at Crown House, Aldwych, by the British Thomson-Houston Co., Ltd. The last dealt primarily with the history of light and the specialized and sometimes highly decorative individual fittings evolved. The current exhibition, however, is intended to interest architects and engineers responsible for modern building who are concerned less with individual lighting fittings, as such, than with lighting systems which may be integrated with the fabric of the buildings in which they are used. In many cases this will involve consideration of lighting in the initial stages of the design of the building.

● The 1955 National Industrial Safety Conference and Trade Exhibition of Industrial Safety Appliances will take place at Scarborough from Friday, May 20, to Sunday, May 22, under the chairmanship of H.M. Chief Inspector of Factories, Sir George P. Barnett.

● Enfield Cables announce the appointment of Mr. G. B. Russell as manager of their Contracts Department, responsible to the sales director.

● Copperad, Ltd., of Colnbrook, Bucks, announce that the factory extension constructed last year has now been completed and is in full production. A further factory extension of twice the area constructed in 1954 is now going forward, the building contract having recently been signed.

● During an experiment conducted by Wates, Ltd., the building and civil engineering contractors, erection time for their New Tradition houses speeded up to such an extent that all the men in the gang earned twice the bonus they had been getting. The basis of the scheme was to keep a constant check on the work of each man in order that all undue wastage of time and effort should be eliminated.

● Mr. J. Rutter has been appointed a technical representative of the Jenolizing Co., Ltd., manufacturers of phosphating processes.

● An official civic welcome was given to a new industry for Cardiff when a timber preservation plant was opened by Hickson's Timber Impregnation Co. (G.B.), Ltd., of Castleford (Yorks) at Cardiff on April 5.

● At the annual general meeting of the Flush Door Manufacturers' Association, Ltd., held at the Waldorf Hotel, London, Mr. R. A. Brough was reappointed chairman for the ensuing year, Mr. E. P. Lawrence was reappointed vice-chairman and the Council was re-elected as before. The chairman reported that they were represented on the British Standards Institution Committee preparing a new Standard for Flush doors.

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Base
Single
Pin
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erection—
only three
field joints
per half
frame



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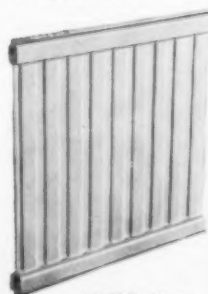
As your plans for central heating take shape, you will find in the Stelrad range of radiators a means of keeping heating efficiency in harmony with interior design.

Two well-known Stelrads are shown on the right, and an eleven inch two column curved radiator is shown in the picture above. Variations of these radiators are, of course, available.

We have agents and representatives throughout the British Isles at your disposal to advise on the Stelrad range of central heating radiators.



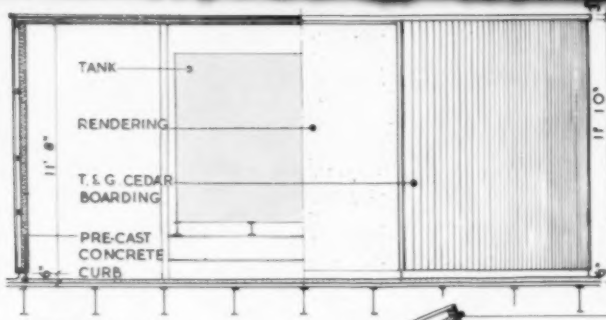
Four column
Stelrad Radiator



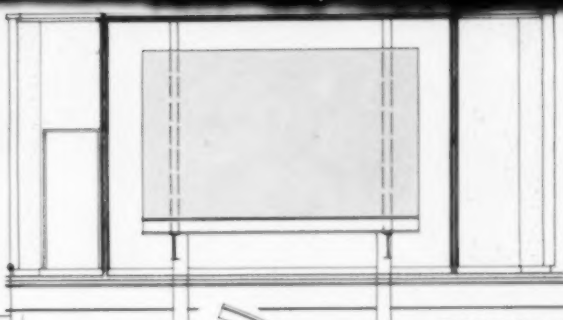
Wall Radiator

**STEEL RADIATORS
LIMITED**

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SECTION A-A



SECTION B-B • 1' 8" x 1' 0"

4" x 1" T & G V JOINTED CEDAR BOARDING
2 1/2" WOODWOOL SLABS
TWO 2" x 2" STUDS

TIMBER EDGING

GRILLAGE BEARING WATER TANK

HALF PLAN OF ROOF STEELWORK

LINE OF STORAGE TANK OVER
DUCT WALL UNDER
DRAINAGE PIPES
LINE OF EXPANSION TANK OVER
WOODWOOL SLABS ON STEEL TEES
DUCT ACCESS

HALF PLAN THROUGH CLADDING
• 1/4" TO 1' 0"

MASTIC POINTING

ROOFING FELT ON SCREED

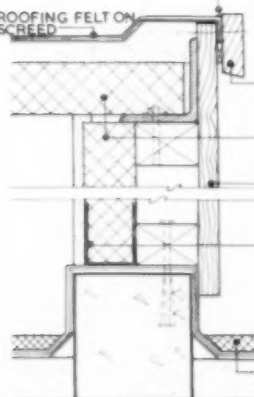
E E

D D

3/4" RENDERING

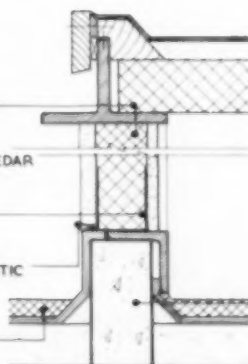
2 1/2" WOODWOOL SLABS

CURVED PERIMETER ANGLE

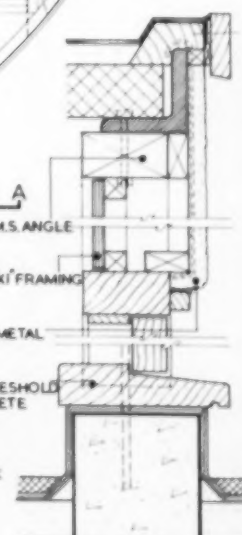


SECTION C-C

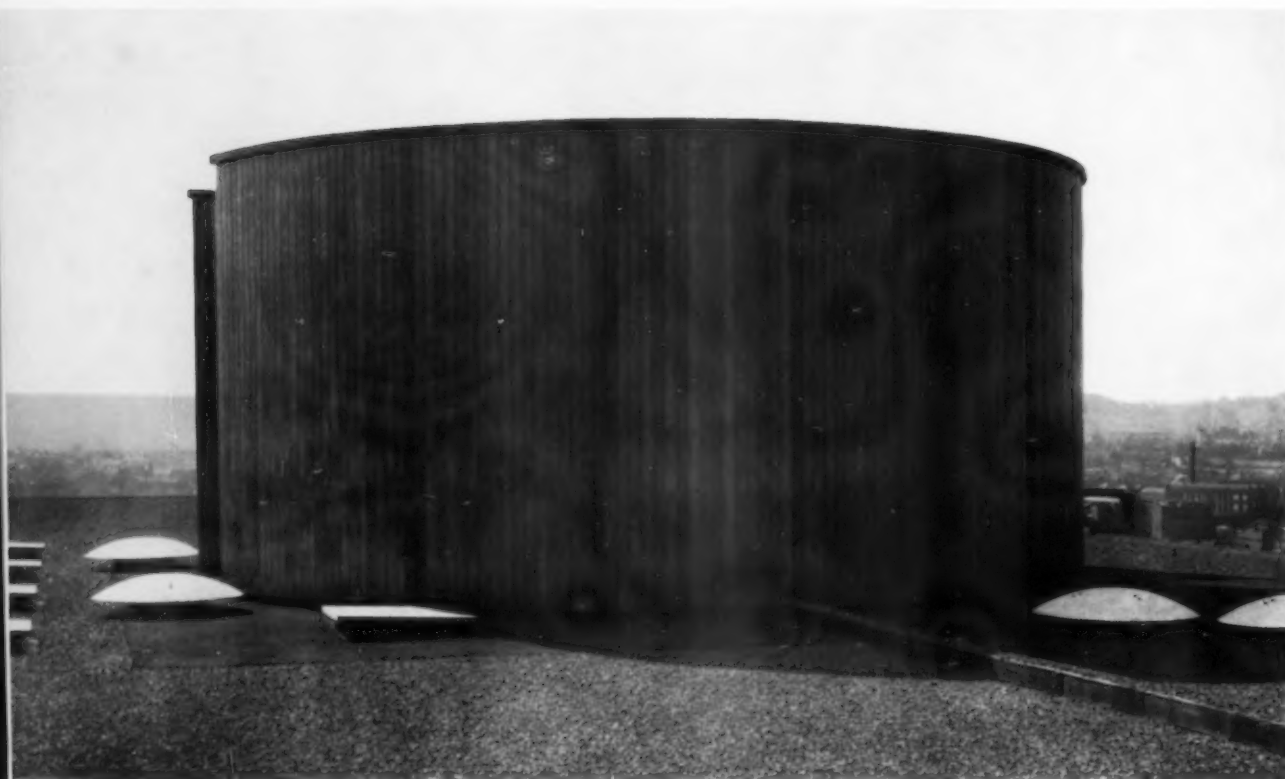
SCALE • 1/8" = 1' 0"



SECTION D-D



SECTION E-E



TANK ROOM: CATFORD COUNTY SECONDARY SCHOOL
Dr. J. L. MARTIN, ARCHITECT TO THE L.C.C.



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be a pleasure!*

In the garden it's quiet. If the machine shop was as peaceful, nobody would have that "Monday-morning" feeling all the week. The thundering machinery, the whine as metal bites into metal, the overwhelming din, strains nerves to breaking pitch and encourages the 'odd day off'. Something must be done about it—call in Cullum. Cullum's acoustic engineers reduce noise and restore sounds to a tolerable level. Cullum *ought* to be called in straight away.

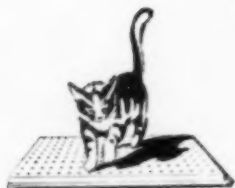
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THE ACOUSTIC CONSULTANTS AND CONTRACTORS

Concessionnaires for

ACOUSTI-CELOTEX



PROGRESS WITH QUIETNESS HORACE W. CULLUM & CO. LTD., FLOWERS MEWS, LONDON, N.19 Tel : ARC 2662 (4 lines)

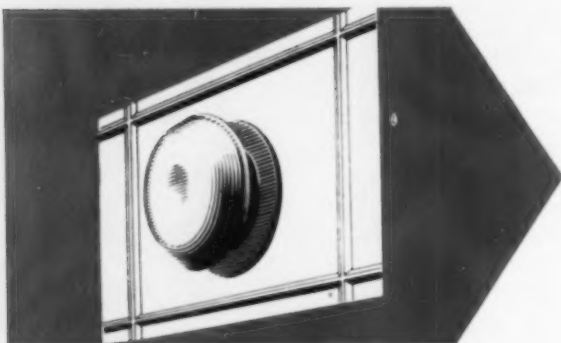
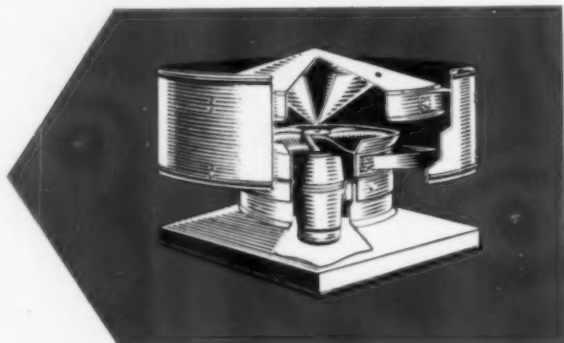
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GREENWOOD-AIRVAC *Mechavent**

This is a roof ventilator of proved performance available for flat, sloping or ridge fixing. Extraction can be natural or mechanical with built-in fan available in a wide variety of standard ratings.



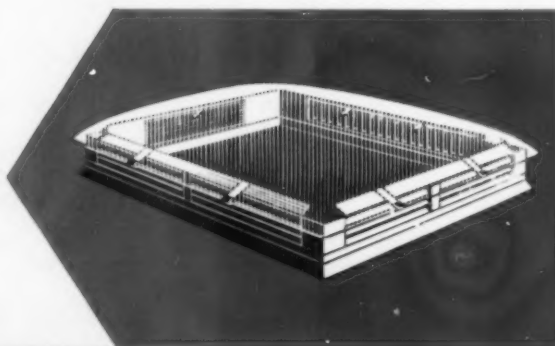
RECTANGULAR VENTILATOR WITH STANDARD GLASS DOME

Designed for roof-lighting and ventilating interior corridors and rooms, constructed in suitable sizes to carry standard sized glass domes, this unit provides natural ventilation via weatherproof external louvres, with internal hit and miss shutters incorporated if desired.

* Greenwood's Lowline Mechavents and Glass Dome Ventilators have been installed in the new factory for Murphy Radio Stage 1, Welwyn Garden City.

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The silent lightweight fan unit for window mounting that ensures healthy fresh-air conditions in office, restaurant, factory or home. Operated from any 5-amp electric point without special wiring. Constructed from aluminium alloy, enamel finished to resist weather and corrosion. Available in 3 models: standard, closable and lightproof each in 2 sizes, 6" and 9".



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FOR VENTILATION

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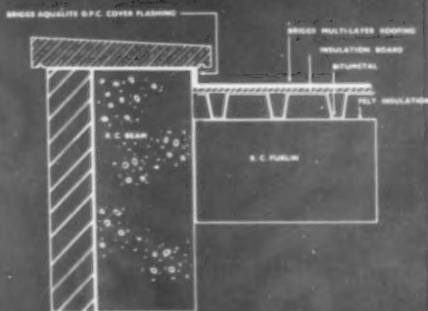
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Ventilating Equipment for Buildings,
Vehicles and Ships

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CHAncery B135/6/7. "Airvac", London

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Architects about
to plan Roofs!*

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CONTRACT • NEWS •

address it is the same as the locality given in the heading, (c) deposit, (d) last date for application, (e) last date and time for submission of tenders. Full details of contracts marked ★ are given in the advertisement section.

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OPEN

BUILDING

BIRKENHEAD B.C. (a) 31 garages and gardens depot, Woodchurch Estate. (b) Borough Architect, 3, Conway Street. (c) Ign. (e) May 31.

BLACKPOOL B.C. (a) Erection of self-service store with 4 maisonettes over, Mereside Estate. (b) Borough Surveyor, P.O. Box 17, Municipal Buildings. (c) £2.

BOURNEMOUTH B.C. (a) Erection of Winton and Moordown girls' school, Boundary Road, Bournemouth. (b) Borough Architect, Room 106, Town Hall. (c) 5gns. (e) July 8.

BRIDGNORTH B.C. (a) 40 houses, The Grove Estate. (b) Council's Architect, Bournville Village Trust, Estate Office Bournville, Birmingham, 30. (c) 2gns. (e) May 27.

BRIGHOUSE B.C. (a) Contract 36. 5 houses and 8 flats, Lillands Lane. (b) H. A. Sneezum, Commercial Street. (c) June 13.

BRIGHTON B.C. (a) 14 flats at junction of Carden Hill and Woodbourne Avenue, Hollingbury. (b) Borough Engineer, 26-30, Kings Road. (c) 2gns. (e) June 1.

BRISTOL E.C. (a) Adaptations to Merrywood grammar school for boys. (b) Messrs. Imrie, Porter and Wakefield, 18, Orchard Street, 1. (c) 2gns, cheque payable to Corporation. (d) May 23. (e) June 16.

BROMSGROVE U.C. (a) 5 bungalows, Chadwick Estate, Rubery. (b) Borough Engineer, Council House. (c) 3gns. (e) May 28.

CHESTERFIELD R.C. (a) 26 houses and 4 bungalows at Beighton, 4 houses at Walton, 49 houses at Brimington, 30 houses and 4 bungalows at Eckington, 8 houses at Shirland. (b) Council's Engineer, Rural Council House, Saltergate. (c) 2gns each contract. (e) June 2.

CROYDON B.C. (a) 19 dwellings, Wilford Road/Forster Road redevelopment area. (b) Borough Engineer, Katherine Street.

CWMBRAN U.C. (a) 13 houses, Belle Vue site, Abbey Road; 8 houses, Two Locks Estate; 11 houses, Holly Bush site, Ton Road. (b) Council's Architect, Council Offices. (c) 3gns cheque payable to Council. (e) May 28.

DOVER B.C. (a) Contract No. 48. 24 houses in 6 blocks of 4, Aycliffe Estate. (b) Borough Engineer, Brook House. (c) 2gns. (e) June 8.

DUNSTABLE B.C. (a) 98 houses and flats, Downside Estate. (b) Borough Surveyor, Municipal Offices. (c) 2gns. (d) May 23. (e) June 15.

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EAST RIDING OF YORKSHIRE C.C.

(a) Erection of a headmaster's house and a caretaker's house on the site of the proposed Molescroft secondary school, Beverley. (b) County Architect, County Hall, Beverley. (c) £2. (e) June 14.

EAST SUFFOLK C.C.

(a) Police house at Woodbridge, one at Debenham, and one at Kirton. (b) County Architect, County Hall, Ipswich. (c) 2gns each house. (d) May 27. (e) June 17.

EAST RIDING OF YORKSHIRE C.C.

(a) Erection of houses for the Headmaster, Headmistress and caretaker, on the site of the proposed secondary schools at Driffield. (b) County Architect, County Hall, Beverley. (c) £2. (e) June 14.

HYTE B.C.

(a) Contract No. 5. 12 houses, Horn Street site. (b) Borough Surveyor, Municipal Offices. (c) 2gns. (d) May 25.

LEITCHWORTH U.C.

(a) Erection of (Scheme 7P) 20 houses and 22 garages; and (Scheme 7Q) 27 houses, Grange Estate, Northfields. (b) Council's Clerk, Council House, Broadway. (e) June 10.

LONDON—BARNES B.C.

(a) 16 flats, Mortlake High Street, S.W.14. (b) Borough Engineer, Municipal Offices, Sheen Lane, S.W.14. (e) June 3.

LONDON—HORNSEY B.C.

(a) 7 houses, 6 flats and 6 garages, Quernmore Road, N.4. (b) Borough Engineer, Town Hall, N.8. (d) May 27. (e) June 27.

MANCHESTER C.C.

(a) Erection of (Contract 208) 74 maisonettes and flats at Wastdale Road, Wythenshawe; (Contract 211) 122 maisonettes and flats at Langley, Middleton; (Contract 234) 15 houses at Lightbowne Road, Moston; and (Contract 236) 22 maisonettes and flats at Reather Street, Collyhurst. (b) Director of Housing, Town Hall. (e) June 7.

NEWCASTLE-UPON-TYNE C.C.

(a) 3 houses, Grasmere Avenue, Walker Estate. (b) City Architect, 18, Cloth Market, 1. (e) June 3.

NEW FOREST R.C.

(a) 6 pairs of houses, Canterton Lane, Brook. (b) Council's Engineer, Council Offices, Lyndhurst, Hants. (c) 2gns. (e) May 31.

N. IRELAND—BELFAST C.C.

(a) Primary school, Greenwood House, Upper Newtownards Road. (b) Education Architect's Department, 40, Academy Street. (c) £5. (e) June 2.

N. IRELAND—GOVERNMENT OF NORTHERN IRELAND.

(a) Erection and completion of R.U.C. district headquarters, barracks and married quarters, Market Street, Magherafelt, Co. Londonderry. (b) Ministry of Finance, Room 103, Law Courts Building, May Street, Belfast. (c) £5. (e) June 13.

N. IRELAND—NORTHERN IRELAND HOUSING TRUST.

(a) 137 dwellings, together with ancillary works, Ballyclare, Co. Antrim. (b) Northern Ireland Housing Trust, 12, Hope Street, Belfast. (c) £3. (e) June 8.

ORRELL U.C.

(a) 20 houses, Kitt Green Estate. (b) Council's Surveyor, Council Offices, Orrell Post, Nr. Wigan. (c) 2gns cheque payable to Council. (e) June 4.

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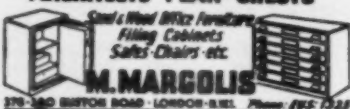
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OSWESTRY R.C.

(a) Erection of (1) 5 blocks of houses at Llanymynech, (2) 4 blocks of houses at Trefonen, (3) 3 blocks of houses at Mesbury Marsh, and (4) 3 blocks of houses at Park Hall. (b) Council's Surveyor, Council Offices, Castle View. (c) 3gns. (e) May 30.

ROWLEY REGIS B.C.

(a) 34 houses, Tivdale Hall Estate. (b) Borough Architect, Municipal Buildings, Old Hill. (c) 3gns. (e) June 6.

SCOTLAND—GLASGOW CORPORATION.

(a) 30 flats at Wedderlea Drive, 6 flats at Cairn Street and 6 flats at Closeburn Street. (b) Architectural and Planning Department, 20, Trongate, Glasgow, C.1. (e) June 2.

SELBY R.C.

(a) 3 pairs of houses at Barlow, 1 pair of houses at Brayton, 2 pairs of houses at Carlton. (b) G. L. Thompson, Clifton Chambers, Park Street. (c) 2gns. (e) May 31.

SKEGNESS U.C.

(a) 8 pairs of houses, Sundial Estate. (b) Council's Engineer, Town Hall. (c) 2gns. (e) June 4.

SOUTHPORT B.C.

(a) 107 dwellings, Radnor Drive Estate. (b) Borough Architect, 99-105, Lord Street. (c) Ign. (e) May 27.

SOUTH SHIELDS B.C.

(a) 95 houses, Simonside Estate. (b) Borough Engineer, Town Hall. (c) 2gns. (e) June 6.

SOUTH SHIELDS B.C.

(a) 39 houses, Jesmond Terrace, Simonside. (b) Borough Engineer, Town Hall. (c) 2gns. (e) June 6.

STOCKTON-ON-TEES B.C.

(a) Erection of a junior and infant school, Redbrook Avenue, Roseworth. (b) Borough Architect, 28, The Square. (c) Ign. (e) May 27.

WALLSALL B.C.

(a) Erection of (Contract 1) 54 houses and (Contract 2) 28 houses, Mossley Estate. (b) Borough Engineer, Council House. (c) 2gns. (e) June 1.

WARMINSTER U.C.

(a) Erection of 24 houses on the adjoining estates of Boreham Field and Queensway, Warminster, and a possible further contract of 22 houses to complete the Queensway Estate. (b) Messrs. Snailum, Huggins and Le Fevre, 18, Brock Street, Bath. (c) 2gns cheque payable to Council. (e) June 1.

WEYMOUTH AND MELCOMBE REGIS B.C.

(a) 15 houses at Chapelhay, Weymouth. (b) Borough Engineer, 6, Pulteney Buildings, Weymouth. (c) 2gns. (e) June 3.

WOKING U.C.

(a) Contract No. 9. Block of 6 shops with maisonettes over and 2 pairs of houses, Maybury Estate. (b) Council's Engineer, Council Offices. (c) 2gns. (e) June 6.

WORCESTER C.C.

(a) 30 houses in terraces of 4 and pairs, Warndon site. (b) City Engineer, 22, Bridge Street. (c) 3gns. (e) June 2.

WORTHING B.C.

(a) Erection of a public library and public convenience, Mulberry Lane, Goring-by-Sea. (b) Borough Engineer, Town Hall. (c) 2gns. (d) May 30.

YORK C.C.

(a) Block of dwellings, Dale Street. (b) City Architect, 8, St. Leonard's Place. (c) £1. (e) June 13.

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CRAWLEY, SUSSEX. (1) Extensions to works for W. Edwards and Co. (London), Ltd. (3) J. Longley and Co., Ltd., Crawley, Sussex. (4) £93,000.

GRIMSBY CORPORATION. (1) 104 houses. (2) Scartho Estate. (3) Taylor and Coulbeck, Ltd., 20, Hawthorne Avenue, Cleethorpes. (4) £137,950.

DONCASTER CORPORATION. (1) Technical high school. (3) J. Dixon (Doncaster), Ltd., Greenfield Lane, Doncaster. (4) £169,192.

YORK CITY COUNCIL. (1) 100 houses. (2) Chapel Field Estate. (3) Sorrell (York), Ltd., Main Street, Heworth, York. (4) £125,496.

FELLING-ON-TYNE U.D.C. (1) 167 houses. (2) Leam Lane. (3) John Clark and Son (New Seaham), Ltd., Seaham, Co. Durham. (4) £227,707. (1) 164 "No Fines" houses. (2) Leam Lane. (3) Geo. Wimpey and Co., Ltd., Orchard House, Newcastle-on-Tyne. (4) £223,102.

BRISTOL CITY COUNCIL. (1) Adaptation at Mullers Orphanage, for College of Technology. (2) Ashley Down. (3) Stone and Co. (Bristol), Ltd., 140, Redland Road, Bristol. (4) £138,106. (1) Second stage of infants school. (2) Bank Lease. (3) Holland & Hannen and Cubitts, Ltd., 1, Queen Anne's Gate, London, S.W.1. (4) £37,501.

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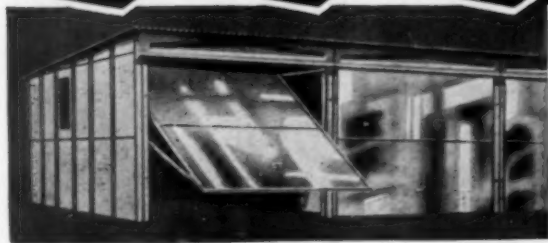
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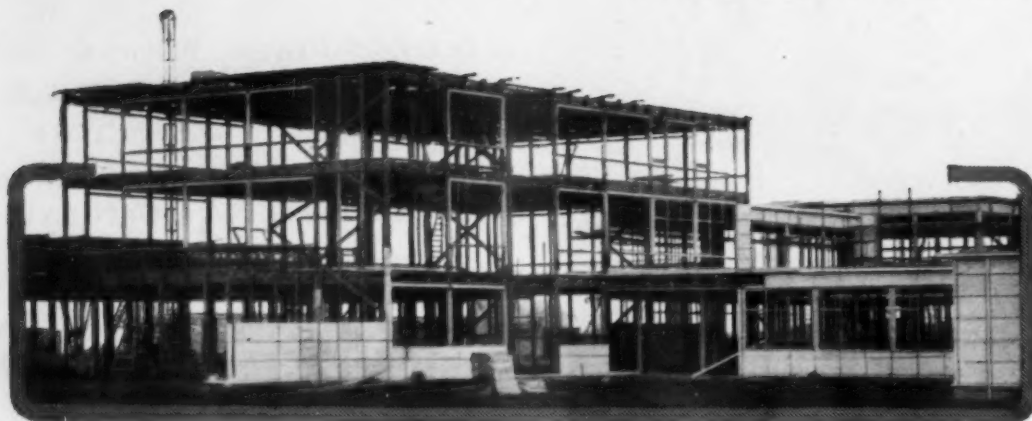
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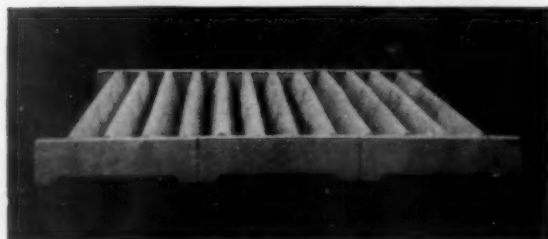
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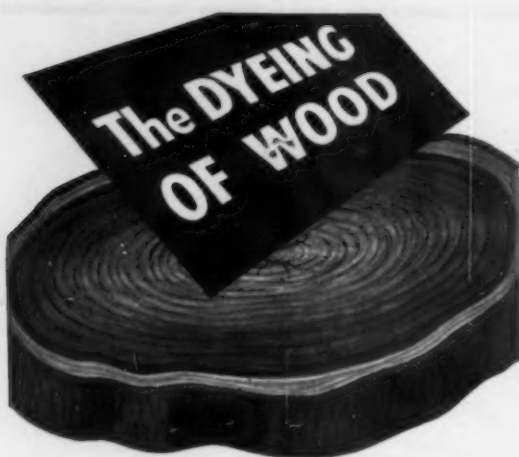
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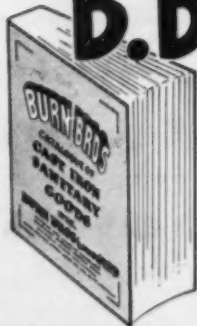
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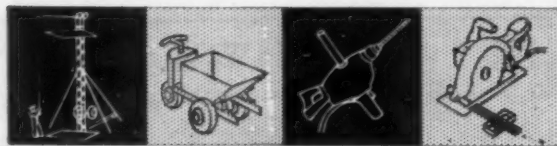
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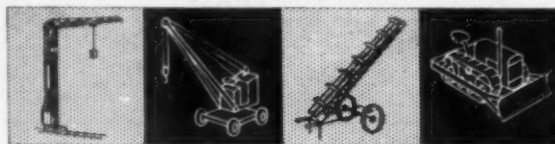
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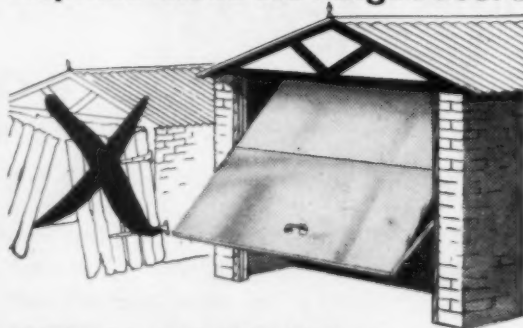
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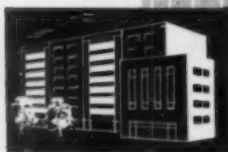
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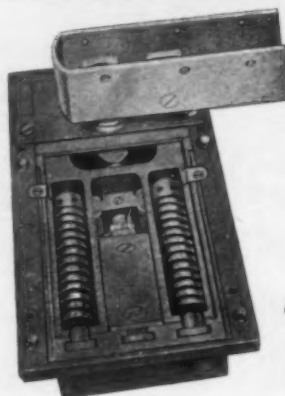


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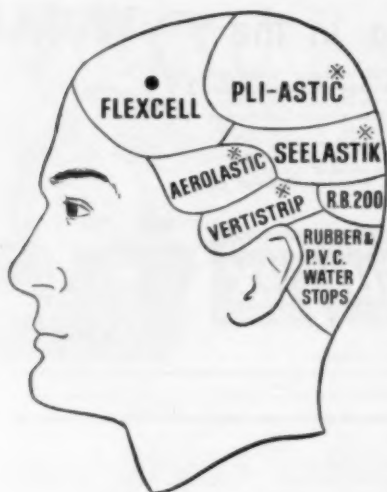
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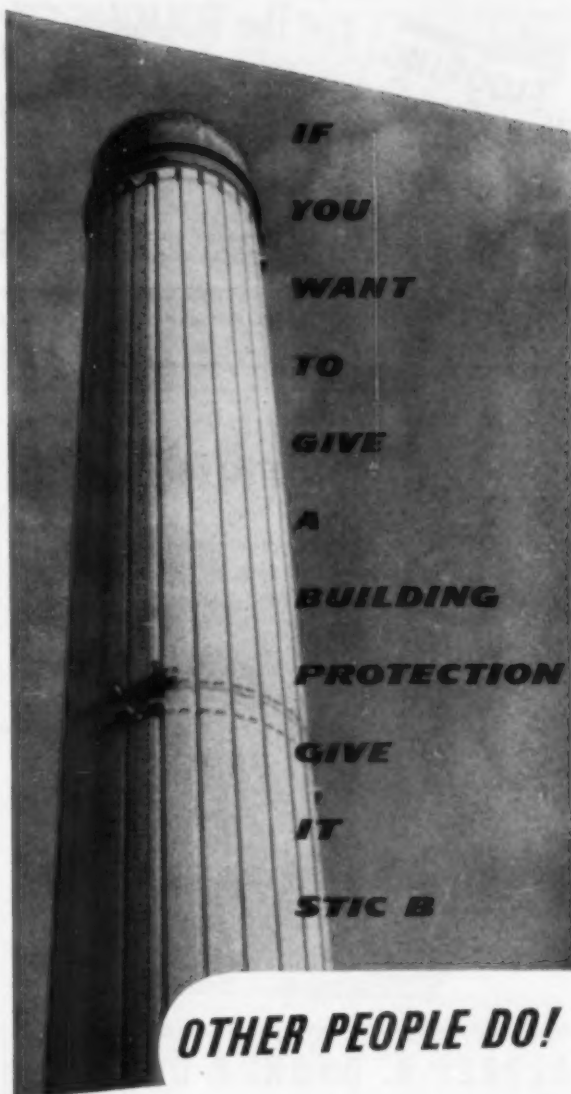
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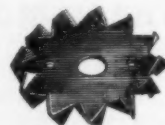
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PRESS NOTICE

JUNE 2nd, issue closing for press FIRST POST
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APPOINTMENTS

The engagement of persons answering these advertisements must be made through the local office of the Ministry of Labour and National Service, etc., if the applicant is a man aged 18-64 or a woman aged 18-59 inclusive, unless he or she or the employer is exempted from the provisions of the Notification of Vacancies Order, 1952.

BOROUGH OF LEYTON.

APPLICATIONS are invited for the appointment of:—

Two GENERAL ARCHITECTURAL ASSISTANTS, Grade A.P.T.II (£560-£640 per annum, plus London Weighting Allowance according to age, which at 26 years is at a maximum of £30).

Candidates should have passed the Intermediate Examination of the R.I.B.A. and must have had good experience in the design and construction of houses, flats and municipal buildings.

Alternate Saturday mornings free of duty and canteen facilities available.

Details of appointments and form of application may be obtained from Mr. H. D. Peake, M.Sc. (Eng.), Borough Engineer and Surveyor, Town Hall, Leyton, E.10. To whom they should be returned not later than Friday, 3rd June, 1955.

D. J. OSBORNE,
Town Clerk.

Town Hall,
LEYTON, E.10. [1018]

OFFICE OF THE RECEIVER FOR THE METROPOLITAN POLICE DISTRICT.

APPLICATIONS are invited for unestablished appointments as Architectural Assistants (New Works and Maintenance Branches) and also as Sanitary Engineering Assistants in the Chief Architect and Surveyor's Department.

Rates of Pay £442 10s (age 21) by annual increases to £695 (men) and £442 10s by annual increases to £615 (women). Overtime of approximately £24 per annum is also payable while a 45½-hour week is worked.

Conditioned hours 44 per week. Annual Leave 24 days.

Application forms from the Chief Clerk, Architect and Surveyor's Department, New Scotland Yard, S.W.1, stating for which drawing office application is made. [0958]

BOROUGH OF OLDBURY.**BOROUGH SURVEYOR'S DEPT.
ARCHITECTS' SECTION.**

APPLICATIONS are invited for the appointment of an Architectural Assistant Grade A.P.T.3 (£660-£725). Applicants for the appointment should be good architectural draughtsmen with experience in the preparation of working drawings and details from preliminary sketches and should have good experience of housing and education work normally undertaken by Local Authorities and capable of administering small building contracts.

The appointment will be superannuable, subject to the National Conditions of Service and to the selected candidate passing a medical examination.

Applications, giving particulars of age, qualifications and experience and the names of two referees, should be delivered to the undersigned not later than Saturday, May 28, 1955.

KENNETH PEARCE,
Town Clerk.

Municipal Buildings,
Oldbury,
Nr. Birmingham.
May 3, 1955. [9997]

APPOINTMENTS—contd.**BEESTON AND STAPLEFORD URBAN
DISTRICT COUNCIL.****JUNIOR ARCHITECTURAL ASSISTANT.**

GRADE II (£560-£640).

APPLICATIONS are invited for the appointment, N.J.C. Conditions of Service. Applications, naming two referees, to the Surveyor, Town Hall, Beeston, Nottingham, by May 31st, 1955.

H. D. JEFFRIES,
Clerk of the Council.

Town Hall,
Beeston, Nottingham. [1037]

GLAMORGAN COUNTY COUNCIL.**COUNTY ARCHITECT'S DEPARTMENT.**

APPLICATIONS are invited from persons who possess the necessary qualifications, and have had the requisite training and practical experience, as laid down by the N.J.C. for Local Authorities' Staffs, for the under-mentioned permanent appointments:—

- Senior Assistant Architects, APT. VI (£825/£1,000).
- Senior Assistant Architects, APT. V (£750/£900).
- Architectural Assistants, Special Grade (£650/£775).
- Architectural Assistants APT II (£560/£640).
- Heating Engineering Assistants, APT. IV (£675/£825).
- Senior Assistant Quantity Surveyor, APT. VI (£825/£1,000).
- Quantity Surveying Assistant, APT. II (£560/£640).
- Junior Assistant for Quantity Surveying, Section, Higher General Division (£170/£475).
- Senior Land Surveyor, APT V (£750/£900).
- Land Surveying Assistants, APT. II (£560/£640).
- Draughtsmen — Architectural/Engineering—MISC. IV (£465/£545).
- Direct Labour Building Estimator, APT. IV (£675/£825).
- Direct Labour Building Estimating Assistant, APT. II (£560/£640).
- Electrical Engineering Assistant, APT. II (£560/£640).

Applications, giving details as to age, qualifications, training and practical experience, together with the names of two Referees, to be forwarded to COUNTY ARCHITECT, COUNTY HALL, CARDIFF, not later than FOURTEEN DAYS after appearance of this advertisement.

Canvassing, directly or indirectly, will disqualify. RICHARD JOHN,
Clerk of the County Council. [1043]

GOVERNMENT OF SIERRA LEONE.**ARCHITECT—
PUBLIC WORKS DEPARTMENT.**

DUTIES are to prepare plans and specifications for buildings of all types.

Appointment is on contract for 18-24 months in the salary scale £886-£1,758 per annum, plus a gratuity of from £25-£37 10s for each completed 3 months' service, payable on completion of contract.

Free 1st class passages are provided for officer and his wife, and up to £75 each for a maximum of two children is granted in respect of their passages or maintenance in the United Kingdom.

Leave is granted at the rate of 7 days for each completed month of resident service. Furnished quarters are provided, if available, at a rent of 10% of basic salary subject to a maximum of £150 per annum.

Candidates must be A.R.I.B.A. and/or hold a degree in Architecture of a recognized University. Apply in writing to the Director of Recruitment, Colonial Office, Great Smith Street, London, S.W.1, giving briefly age, qualifications and experience and quoting reference No. BCD 112/15/011. Closing date June 11, 1955. [1040]

APPOINTMENTS—contd.**GOVERNMENT OF BECHUANALAND.****ASSISTANT ARCHITECTS.**

DUTIES include the preparation of preliminary, working and detail drawings and specifications for all work on proposed building programmes.

Appointments are on contract for 3 years on a fixed salary of £1,134 per annum, including cost of living allowance. Gratuity of £25 for each 3 months resident service is also payable on satisfactory completion of contract.

Furnished quarters provided at a rental of 10% of salary. Free return passages for officer and his wife, and assistance towards children's passages. Leave is granted at the rate of 3½ days for each completed month of resident service.

Candidates should be Associates of the Royal Institute of British Architects. Age limit 45. Apply in writing to the Director of Recruitment, Colonial Office, Great Smith Street, London, S.W.1, giving briefly age, qualifications and experience and quoting reference No. BCD 112/76/08. [1041]

SOUTH EASTERN ELECTRICITY BOARD.**JUNIOR ARCHITECTURAL SURVEYING
ASSISTANT—Headquarters.**

SALARY £425-£525 under N.J.C. Grade I. Superannuable. Applicants must be capable of giving assistance as required in the Drawing Office and in preparing working drawings under supervision for minor works. The ability to carry out site surveys an advantage.

Applications, naming 2 referees, to R. E. J. Harding, F.I.A.S., A.M.S.E., Surveyor, SEEBORD, 10, Queen's Gdns., Hove, 3, by June 1st, 1955.

A. L. BURNELL,
Secretary. [1032]

**URBAN DISTRICT COUNCIL OF
ELLESMERE PORT.****APPOINTMENT OF BUILDING MANAGER.**

APPLICATIONS are invited from suitably qualified and experienced men for the post of Building Manager in the Department of the Engineer and Surveyor at a Salary within Grade IV of the A.P.T. Division of the National Scale of salaries (£675-£825 per annum). The weekly tenancy of a Council house will be offered to the successful applicant on appointment if he reasonably requires housing accommodation for his family. Applicants must have had considerable experience of the Building Trade, including the repair and maintenance of houses and other buildings, the execution of new building work by direct labour, the supervision of labour of all trades, and the operation and maintenance of equipment, plant and workshops. The successful applicant will be required to administer, under the general supervision of the Engineer and Surveyor to the Council, a section of his Department responsible for the maintenance of over 5,000 houses and for the expenditure of between £50,000 and £100,000 per annum.

Experience in the preparation of estimates and reports to Committees will be an advantage and the successful applicant will be required to attend all meetings of the Council's Housing Committee. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

Applications on a Form of Application (which may be obtained from the Council's Engineer and Surveyor, Council Offices, Ellesmere Port) and enclosed in a sealed envelope endorsed "Building Manager", together with the names and addresses of three persons having knowledge of the applicant's experience and antecedents to whom references may be made, must reach me by not later than the 31st May, 1955.

P. J. HODGES,
Clerk of the Council.
Council Offices,
Ellesmere Port.
12th May, 1955. [1042]

APPOINTMENTS—contd.**BARNET URBAN DISTRICT COUNCIL.****SENIOR ARCHITECTURAL ASSISTANT.**

APPPLICATIONS are invited for the above appointment in the Engineer and Surveyor's Department (Grade IV £675 to £825 + £30 London Weighing).

Applicants should be A.R.I.B.A. with responsible housing experience.

Appointment subject to N.J.C. conditions, Superannuation and medical examination.

Housing accommodation can be provided.

Applications, with full details, should be submitted to the Engineer and Surveyor, Ravenscroft House, Wood Street, Barnet, Herts, by May 28th, 1955.

ALFRED S. MAYES,
Clerk of the Council.

Municipal Offices,
Wood Street,
Barnet,
Herts.
May 6th, 1955.

[1028]

THE Department of Health for Scotland: Applications are invited for non-pensionable posts of Investigator of buildings of architectural or historic interest. Duties involve survey in Scotland in connection with listing of such buildings under the Town and Country Planning (Scotland) Act, 1947.

Applicants should hold a qualification in Architecture or Town Planning, or a Degree in History or the Fine Arts, and be prepared to show evidence of special interest in the field of Scottish Architectural History.

Headquarters Edinburgh, or as may be arranged. Inclusive salary ranges approx. £937-£1,045 for men, £826-£929 for women, in Edinburgh or Glasgow. Slightly less elsewhere.

Further particulars and application form from Establishment Officer, Department of Health for Scotland, Room 30, St. Andrew's House, Edinburgh, 1. Closing date for applications June 4th, 1955.

[1026]

LONDON COUNTY COUNCIL.**ARCHITECT'S DEPARTMENT.**

VACANCIES for Architects Grade III (up to £892 10s) and Architectural Assistants (up to £739 10s), for widespread construction programme which includes houses, blocks of flats, schools of all types, and various public and industrial buildings. Application forms and particulars from Architect (AR/EK/A/3), The County Hall, S.E.1. (678.)

[1034]

BOROUGH OF WATFORD.**ASSISTANT ARCHITECT.**

APPPLICATIONS are invited for the appointment of an Assistant Architect on Grade II A.P.T. (£560-£640 p.a.) Commencing salary will be fixed according to experience.

Application forms obtainable from the undersigned are to be returned by May 31st.

F. C. SAGE,
Borough Engineer, Surveyor & Architect.
Town Hall,
Watford.

[1027]

NEW TOWN OF CWMBRAN, MON.

APPPLICATIONS are invited for the following superannuable vacancy in the Chief Architect's Department:—

JUNIOR ASSISTANT ARCHITECT.
Commencing salary £650 on range £650-£825-£775.

Candidates should be either graduate architects, or have passed the Final Examination of the R.I.B.A. Office experience would be an advantage.

Housing accommodation will be made available in suitable cases or otherwise lodging expenses in accordance with the Corporation's scale will be paid to married men for a limited period.

Applications, stating age, experience, details of present and former employment (together with applicable salaries) and the names and addresses of two referees must reach the undersigned by first post on May 27, 1955.

J. C. P. WEST, A.R.I.B.A., A.M.T.P.I.,
Chief Architect.
Victoria Street,
Cwmbran, Mon.

[1035]

LONDON COUNTY COUNCIL.**ARCHITECT'S DEPARTMENT.**

VACANCIES for ARCHITECTS, Grade III (up to £892 10s), and ARCHITECTURAL ASSISTANTS (up to £739 10s), in Schools and Housing and General Divisions.

Particulars and application forms from Architect (AR/EK/A/3), County Hall, S.E.1. (1058).

[1046]

APPOINTMENTS—contd.**NATIONAL COAL BOARD—
NORTH EASTERN DIVISION.**

APPPLICATIONS are invited for the following appointments to the staff of the Divisional Chief Architect at Denaby Main, near Doncaster:—

1. **ARCHITECTURAL ASSISTANT GRADE II.**—Scale: £440 + £20-£540 per annum.

Applicants should have passed the Intermediate Examination of the Royal Institute of British Architects, and have had some subsequent practical experience, and should be able to prepare Sketch Plans and Working Drawings under supervision and have a sound knowledge of building construction.

The point of entry into this Grade will depend upon qualifications and experience.

2. **JUNIOR ARCHITECTURAL ASSISTANT.**—Scale: £2 17s 6d per week at 16 years of age rising to £8 per week at 25 years of age, according to age.

Applicants should have obtained their General Certificate of Education in sufficient subjects to enable them to proceed with the Intermediate Examination of the Royal Institute of British Architects, and should preferably be studying for such Examination.

The work of the office consists chiefly of Pithead Baths, Canteens, Medical Centres, Offices, Laboratories, etc.

Application forms may be obtained from the Divisional Chief Architect, J. A. Dempster, F.R.I.B.A., Architect's Department, P.O. Box No. 4, Denaby Main, Nr. Doncaster, and when completed should be returned not later than June 11, 1955.

[1031]

GEORGE WIMPEY & CO., LIMITED.

THE Architects' Department seek architectural staff enthusiastic to apply their knowledge to new construction techniques covering Houses, Multi-Storey Flats, Offices, Schools and Industrial Buildings for contracts in the U.K. and Overseas.

Appointments range from Architects to Draughtsmen with special interest to those of ability, recognising the value of the designer and technician as an integral part of the production team.

Appointments are on a permanent basis, 5 days a week at Head Office, Hammersmith.

For applicants interested in work in the Midlands, appointments are available in Birmingham Regional Office, carrying similar conditions with the exception that the working week is 5½ days.

Salaries will be subject to qualifications and experience, and, according to satisfactory service, there is a Pension scheme for those wishing to make a career with the firm.

Applicants should write giving brief particulars to E. V. Collins, A.R.I.B.A., Chief Architect, George Wimpey & Co., Ltd., 27, Hammersmith Grove, London, W.6.

[9018]

**METROPOLITAN BOROUGH OF
LEWISHAM.**

APPPLICATIONS are invited for the following appointments:—

PRINCIPAL ASSISTANT ARCHITECT.
Applicants should be Fellow or Associates of the R.I.B.A. Salary scale £930-£1,130 p.a. (A.P.T. VII.)

ASSISTANT ARCHITECT. Applicants should be suitably qualified. Salary within the range £510-£930 p.a., according to qualifications and experience.

Further particulars and forms of application from the Town Clerk, Lewisham Town Hall, S.E.6. Closing date Tuesday, May 31, 1955.

[1044]

LONDON ELECTRICITY BOARD.**ENGINEERING DRAUGHTSMAN.**

APPPLICATIONS are invited for the above position in the Design & Planning Branch of the St. Marylebone/St. Pancras District.

Applicants should have had a good general and technical education in electrical engineering and building construction and experience in a mains records office dealing with systems of all voltages up to 11 kV.

The post is graded under Schedule "D" of the National Joint Board agreement as Grade 6-£535 10s to £661 10s per annum, inclusive of London Allowance.

Application forms obtainable from Personnel Officer, 46-7, New Broad St., London, E.C.2, to be returned completed by May 28, 1955. Please enclose addressed envelope and quote ref. V/1967/AA.

[1057]

CONTEMPORARY approach required from Assistant about Inter-Standard for interesting work in new office in South East London or W.I. Opportunity to work on prefabrication techniques. Good salary and working conditions, write full details of experience, etc., to Box 3973, c/o A. & B. N.

[1038]

APPOINTMENTS—contd.**BOROUGH OF SWINTON & PENDLEBURY.**

APPPLICATIONS are invited for the following appointments:—

FIRST ENGINEERING ASSISTANT, A.P.T. V. commencing at £750 and rising to £900 per annum. Applicants to be Chartered Civil and/or Municipal Engineers with considerable experience in the work of a Borough Engineer's Department.

ARCHITECTURAL ASSISTANT, A.P.T. III-IV. £600-£725-£825 per annum; commencing salary to be determined having regard to qualifications and the gradings for Special Classes of Officers (N.J.C. Circular 113A). The work will be mainly in connection with housing development.

Form of application obtainable from the Borough Engineer, Town Hall, Swinton, Lancs, must be returned to me not later than Monday, June 13. Canvassing will disqualify.

VINCENT COLLINGE,
Town Clerk.
[1059]

ABERDEEN HARBOUR COMMISSIONERS.**HARBOUR ENGINEER'S DEPARTMENT.**

APPPLICATIONS are invited for the post of **STRUCTURAL ENGINEERING ASSISTANT or BUILDING SURVEYOR** in the Harbour Engineer's Office, Aberdeen. Applicants should have experience in structural steelwork, reinforced concrete and general building design and construction. The salary, £515-£715 according to qualifications, rising by annual increments of £15. Applications, stating age and qualifications, with full details of experience, together with copies of recent testimonials, should be lodged with the Harbour Engineer, 15, Regent Quay, Aberdeen, not later than June 4, 1955.

Aberdeen.
May 10, 1955.

[1062]

**BRACKNELL DEVELOPMENT
CORPORATION.**

APPPLICATIONS are invited for the appointment of **STRUCTURAL ENGINEER** on the staff of the Chief Architect. Salary Grade £975 x £503 x £450 (1) to £1,170. Applicants should be Corporate Members of the Institution of Structural Engineers and have had good all-round experience. The successful applicant will be required to advise the Chief Architect on all matters relating to structural work and foundations to buildings, including factories, public buildings, etc., to prepare designs and to supervise all the specialist works.

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[1063]

**ROYAL TECHNICAL COLLEGE OF
EAST AFRICA.**

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APPPLICATIONS are invited for posts of **LECTURER and ASSISTANT LECTURER** in the Department of Architecture, to assist the Head of Department in launching and running a 5-year course up to level of R.I.B.A. final examination. Candidates should be F. or A.R.I.B.A. Good teaching experience essential for lecturer, desirable for assistant; experience in practice desirable for both.

The College, established under an autonomous Governing Council by the Royal Technical College of East Africa Act, 1954, is being built in Nairobi as the main instrument in British East Africa of higher technical and commercial education for students of all races and will admit first students in March, 1956.

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Write for further information to Secretary, Advisory Committee on Colonial Colleges, 1, Gordon Square, London, W.C.1. Closing date for applications (6 copies) 13th June, 1955.

[1066]

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Warror Square, St. Leonards-on-Sea (Hastings
312-3), and Messrs. KNIGHT, FRANK &
RUTLEY, 20, Hanover Square, London, W.1
(Mayfair 3771). [1053]

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aged 18-59 inclusive, unless he or she or the em-
ployer is exempted from the provisions of The
Notification of Vacancies Order, 1952.

SENIOR and Junior Architectural Assistants re-
quired, apply stating experience and salary
required. J. HASLAM & SONS, Architects & Surveyors,
Newcastle Avenue, Workop, Notts. [1029]

LONDON firm has vacancy for experienced
group leader. Salary £1,200 p.a.—Write in
confidence, with full particulars of career, to Box
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F.R.I.B.A., require senior and junior
architectural assistants with office experience.—
Apply in writing to 46, Baker St., W.1. [0071]

ARCHITECT'S Assistants required (1 senior
and 2 juniors) for West End office.—Write
stating full particulars and salary required to Box
2085, c/o A. & B.N. [8819]

ARCHITECTURAL assistant required; salary
according to experience and ability.—Write
giving full particulars to M. Rainford Fletcher &
Partners, 13, Ambrose Place, Wokingham. [1065]

ARCHITECTURAL assistant, intermediate
approaching final, commercial and industrial
work; large-scale contracts.—Watson, Johnson,
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West End office; salary £350-£700 p.a. accord-
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several years' experience and capable of running
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—Write giving particulars to Ivor Jones & John
Bishop, 6-7, St. John's Square, Cardiff. [1064]

ARCHITECTURAL assistants required; salary
£450-£600 p.a. according to experience.—
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Gibberd, 8, Percy St., London, W.1. [1055]

JUNIOR and intermediate architectural assistants
required urgently in London office with widely
varied practice; good salaries; 5-day week.—Lewis
Solomon, Son & Joseph, Hol. 5104 or 7082. [0938]

ARCHITECTURAL assistants urgently required,
senior and junior, important work, good pay
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Norman, Preston & Partners, 83, Kingsway, W.C.2.
[1015]

ARCHITECTURAL APPOINT-
MENTS VACANT—contd.

LONDON architects require Junior Assistants
and Senior Assistant for commercial and in-
dustrial practice in London and Home Counties.—
Write, stating age, qualifications and salary
required, to Box 3763, c/o A. & B.N. [9983]

ARCHITECTURAL Assistant required nearing
Final standard. Salary £600-£800. Apply in
writing to Cowell & Mathews, 34, Sackville Street,
W.1. Varied practice including hospitals, schools,
churches, housing, etc. [1039]

ASSISTANT R.I.B.A. (Inter.) standard with
previous office experience required by general
practice; salary about £500 according to experience;
holiday this year.—John Macgregor & Partners, 53,
Great Ormond St., W.C.1. [1050]

ARCHITECTURAL assistant urgently required
in small but busy office in Holborn; varied
practice, including domestic and ecclesiastical work.
—Write, stating experience and salary required, to
Box 4020, c/o A. & B.N. [1056]

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junior staff, competent working drawings essential,
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Write or telephone, Welbeck 9991. [9942]

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A. & B.N. [1004]

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tect's office capable of preparing plans of
dwelling houses. Apply in writing stating age, ex-
perience and salary required.—Wentworth Estates,
Ltd., Trotsworth House, Virginia Water, Surrey. [1003]

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in London, on multi-storey building and other
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qualifications, to Unit Construction Co., Faggs
Lane, Feltham, Middx. [1009]

F. W. WOOLWORTH & Co., Ltd.—Architect's
Assistant required in Chief Architect's office,
London.—Write, giving details of experience and
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Chief Architect, F. W. Woolworth & Co., Ltd.,
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Theatres, Ltd., 149, Regent St., London, W.1. [1011]

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don office of a firm of architects with interests
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dlesex. [1054]

ARCHITECTURAL assistants required; Inter-
mediate standard or over; salary by arrange-
ment up to £800 p.a.; 5-day week; pension scheme;
industrial and general work.—Apply by tel. or
letter, Chief Architect, Brian Colquhoun & Part-
ners, 18, Upper Grosvenor St., London, W.1.
Tel. Mayfair 9636. [1058]

SENIOR ASSISTANT A.R.I.B.A. or equivalent
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Apply Chief Architect, Friary Brewery,
Guildford, Surrey. [9989]

ARCHITECTURAL Assistant required by Brad-
dock & Martin-Smith, A./F.R.I.B.A.; type of
work in progress: schools, offices, flats, churches;
type of office: small and busy; long-term engage-
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the above firm at The East Gallery, St. John's
Church, St. John's Wood, N.W.8, giving age, ex-
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experience of Industrial Design, sound knowledge
of construction and modern materials especially
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Intermediate standard of the Royal Institute of
British Architects.—Applications should be made
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Luton, Beds. [1052]

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MENTS VACANT—contd.

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Salary according to qualifications.—Apply 32,
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1409. [0984]

MINISTRY OF WORKS require Architectural
Assistants for drawing offices in London,
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A.R.I.B.A., Chief Architect, Ministry of Works,
20 (E), Abell House, John Islip Street, London,
S.W.1. [1025]

SITUATIONS VACANT

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of the Ministry of Labour and National Service, etc.,
if the applicant is a man aged 18-64 or a woman
aged 18-59 inclusive, unless he or she or the em-
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CLERK OF WORKS wanted for Medical College
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AGENTS, Sub-agents, Gangers, Foremen-fitters
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Ltd., 54, Cheam Common Rd., Worcester Pk.,
Surrey. [1045]

DESIGNER/Draughtsman wanted to assist de-
signer of church, school and domestic, wood-
work, furniture and interiors; state age, experience
and salary.—Walker-Symondson, Brainree Rd.,
Ruislip. [1048]

CLERK wanted for architects' office to take
charge of recording and filing technical
information and library. Must be intelligent and
methodical. Salary £5 a week. No Saturdays.
W.1.—Write experience to Box 3998, c/o A. & B.N.
[1051]

SURVEYOR required, capable of preparing bills
of quantities from drawings and specifications,
interim valuations and measuring on site. Apply,
in writing, stating experience and salary required,
Tarrant Builders, Ltd., Trotsworth House, Virginia
Water, Surrey. [9998]

CASHIER wanted for long-term building contract
in Home Counties. Thorough experience of
building and civil engineering routine essential.—
Write, giving full details, to Box No. 573, c/o
Geo. Murray (Advts.), Ltd., Brettenham Hse.,
Lancaster Pl., London, W.C.2. [1046]

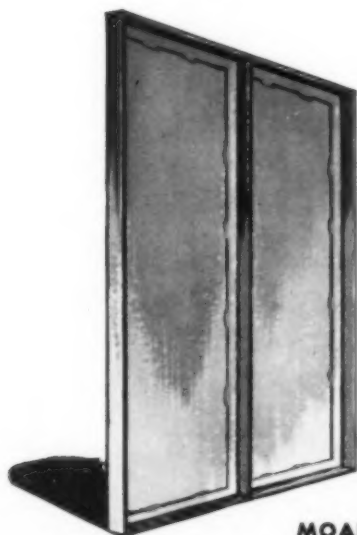
DRAWING office assistant required by firm of
structural engineers, intermediate architectural
qualifications would be an advantage but are not
essential; post offers ample opportunity for promo-
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4, Witney, Oxon. (Tel. Witney 584.) [1013]

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Lancaster Pl., London, W.C.2. [1047]

THE BRITISH PETROLEUM Co., Ltd.,
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take engineering and land surveys at its refinery
at the Isle of Grain; age 25-35; applicants should
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is desirable; Higher National Certificate essential;
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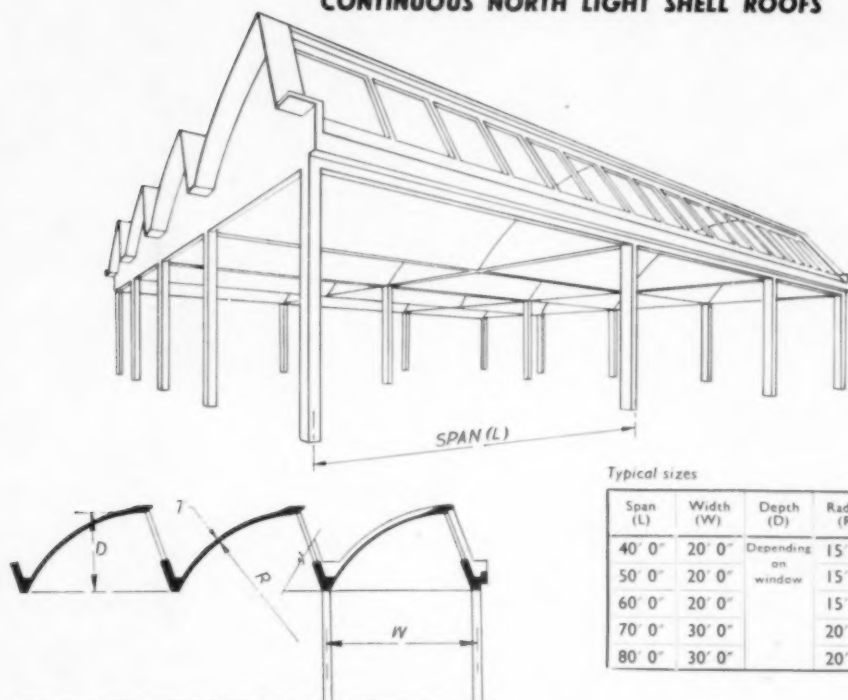
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